THE UNFOLDING OF PERSONALITY

H. THISELTON MARK

Barbara Greenwood

100

U. C. L. A.
NURSERY SCHOOL

THE UNFOLDING OF PERSONALITY AS THE CHIEF AIM IN EDUCATION

THE UNFOLDING OF PERSONALITY AS THE CHIEF AIM IN EDUCATION

SOME CHAPTERS IN EDUCATIONAL PSYCHOLOGY

BY

THISELTON MARK, D.Lit. (Lond.), B.Sc.

LECTURER ON EDUCATION IN THE UNIVERSITY OF MANCHESTER; AUTHOR OF "THE TEACHER AND THE CHILD," "THE NEW MOVEMENT IN EDUCATION," "OUTLINE OF THE HISTORY OF EDUCATIONAL THEORIES IN ENGLAND," "INDIVIDUALITY AND THE MORAL AIM IN AMERICAN EDUCATION," ETC.

CHICAGO
THE UNIVERSITY OF CHICAGO PRESS
1912

TO THE

REV. JOHN NAYLOR,

SCHOLAR

(AND FELLOW-STUDENT),

AND TO

MISS BARBARA FOXLEY, M.A.,

FOR SOME YEARS A FELLOW-TEACHER

OF EDUCATIONAL PSYCHOLOGY

IN

MANCHESTER UNIVERSITY

First Edition . . . 1910
Second Edition . . . 1912

(*All rights reserved.*)

PREFACE

CHILD-STUDY has more than one kind of fascination. It is part of the study of man; man at a stage when the disguises are few and the self-revelations are many. Nothing more readily focusses for us our interest in humanity. Reading deeply into child-nature we are inevitably beginning to read deeply into life and its meanings.

The study of childhood is in itself of universal interest. Opportunities for prosecuting the study are never far to seek. Every school, family, public park, playground, is a laboratory. Crucial experiments are going on whether we heed them or not. The text-book is the child, living out his life before us. The legend which invites us to the study is written in the poetry of free and natural child life: the easy romance, the limitless world of make-believe, and—under even moderately favourable conditions—the spontaneity and the openness of heart and mind. Say "Once upon a time" to children, and they jump back with us to the time that never was. Say "Some day" to children, and they will open their souls to marvel and to believe. This up to, say, eight or nine years of age. Soon after this they begin to want to know "really and truly"; they begin to leave the wonderland of make-believe for the wonderland of fact. A little later, say at twelve or thirteen, they begin to enter consciously upon this wonder-world of fact—scarcely knowing it for a wonder-world now unless their

2081855

educators are themselves gifted with the power of wonder and keep the happy impulse alive in their scholars. Yet a little later, say at fourteen or fifteen, and the boy and girl begin to count in the world of fact, and to expect to count and to be reckoned with. Much has been said of late about the momentous dawning of this consciousness—the consciousness of personality: and much waits to be said. At this age, in some cases even earlier, the boy or girl should be listened to with a real seriousness, equal to the assumed but kindly seriousness with which we listen to younger children, when they speak of what they would like to be. Sometimes it happens that the boy or girl is indifferent to this call of the future. When this is so the education has failed somewhere. Great names in the teaching world might be quoted in support of this opinion, if it needed such support. From this time forward formal education becomes a kind of tacit comradeship. Curriculum, methods of teaching, and, above all, teachers, begin to adapt themselves to the consciousness of the future which figures prominently in the mind of the normal adolescent.

The following chapters are a study of some of the main bearings of psychology upon education in the light of the constantly developing life of the child. They are written either for the general reader who, believing that "the proper study of mankind is man," is willing to begin with the child—with the life-processes within the child and the interplay between these life-processes and our educational procedure; and for the student who needs a handbook not running concurrently with the lectures he receives, but striking a line which amplifies and illustrates the more formal and logically progressive studies of the class-room. In its central aim the book is, as its title suggests, a review of the unfolding of personality as the chief aim and work of education. Familiar words in Spencer's chapter on "What Knowledge is of most Worth," have, doubtless,

suggested this phrasing. The definition there given of the aim of education as a preparation for complete living has an illuminating rendering in the phrase, "the unfolding of our individualities to the full."

The child always, and almost always the school, are before the writer's mind—school as he has lived in it as schoolboy and master, and as he has lived partly in it and wholly for it in connection with a large Training College and a University Department of Education. The writer's greatest direct indebtedness is, without much doubt, to the opportunities which the Demonstration Schools attached to this Department have afforded for personal work with children from five or six to fourteen years of age, and for collective work with students with the same children. A secondary school experience, however, with its happy contacts with much older boys, and the association with students both in the University and in the wider field of Extension lecturing, have contributed to the view which lies right at the centre of the author's mind that there is no more human or more absorbing work than to enter whole-heartedly into the lives of the young, the eager and expectant, both as they are and as, in our hopes and sometimes happily in our assurance, they are to be.

This book is a small contribution to a study which is still in its early stages. Much is consciously omitted. All that is attempted is to link together views of the unfolding which is spontaneous and due to native tendency and of the unfolding which the educator works for and seeks to realise in those he educates.

Note to Second Edition.—Readers whose main interest is in child-study and teaching will find it quite possible to commence reading at Chapter III., continuing, say, to the end of Chapter VII.

THE UNIVERSITY,
MANCHESTER.

CONTENTS

PAGE

INTRODUCTION 11

CHAPTER

I. THE ORIGINAL NUCLEUS OF PERSONALITY . 15

A basis pre-supposed at every stage in the evolutionary process—The higher the species the broader and richer the original basis—(*a*) Spontaneous activity; (*b*) Tendency to develop according to the standard of the species; (*c*) Modifiability by environment, as qualities of the original nucleus of personality—Capacity for the Ideal as a fourth quality.

II. THE SELF-IDENTITY OF AN UNFOLDING PERSONALITY 29

Unfolding of personality, and consciousness itself, as implying change—How to reconcile change with self-identity?—Ways of approaching the question—Man as a compound organism of mind and body—Man as a psychical being—Growth as the harmonising of permanence and change.

III. MAN'S INSTINCTIVE TENDENCIES: (*a*) MOTOR TENDENCIES 42

Do we find the child or do we make him?—Instinct as part of our finding of the child—The child's active tendencies—Use of the child's active tendencies in his education.

CHAPTER PAGE

IV. MAN'S INSTINCTIVE TENDENCIES: (*b*) INSTINCTIVE TENDENCIES WITH AN INTELLECTUAL REFERENCE 61

Range of the child's spontaneity—Intellectual results from instinctive reactions—Instinctive tendencies having direct reference to intellectual results—Curiosity—Attention—Retention—Instincts as due to "lapsed intelligence"—The probable play of consciousness in the making of instincts—Intelligence and instinct not incongruous—Educational considerations: (1) Use of the child's native endowment; (2) Differences in native endowment; (3) Co-operation of body with mind; (4) Wild traits in tame animals.

V. MAN'S INSTINCTIVE TENDENCIES: (*c*) INSTINCTIVE TENDENCIES WHICH HAVE A MARKED ACCOMPANIMENT OF FEELING . . 81

Place of feeling in the mental life—Westermarck's treatment of the fundamental attraction and aversion tendencies—Ribot's "Psychology of the Emotions"—Emotional Instincts: Fear; Aversion from the strange; Anger; Affection: Positive and Negative Self-feeling; the Sex-instinct; Inner Freedom; the Instinct of Efficiency; Sympathy; Reverence; the Sense of Dependence; Surprise and Wonder—Feeling and Behaviour—Interest and Education.

VI. THE MENTAL PROCESS: (*a*) THE BLENDING OF INSTINCT WITH EXPERIENCE . . 112

Instincts as the foundations of experience—Curiosity; Imitation; Sympathy; as examples of instinct blending with experience—Similarly, the growth of Habit: The Acquisition of Speech; Acquisition of skill.

VII. THE MENTAL PROCESS: (*b*) THE CONTINUITY OF THE MENTAL LIFE . . . 137

The common-sense view of the Self as permanent—Continuity between the experience of successive moments—Interpretation of present in terms of past experience—Permanence of memory-groups—Activity as the bond of mental continuity—Consciousness as an activity—Are there breaks in the mental life?—Bearing of the discussion upon educational practice.

CHAPTER PAGE

VIII. THE MENTAL PROCESS: (*c*) SELF-DETERMINATION 159

The decision between courses of action—The part played by deliberation—The decision between types of character—Remorse and Responsibility—Self-determination as limited by our own finiteness, and by our environment—The need in education for practice in the use of character.

IX. THE MENTAL PROCESS: (*d*) THE PLAY OF THE SUB-CONSCIOUS 179

The resourcefulness of human personality—Examples of the operation of the sub-conscious—Theory of a "cosmic memory"—Theory of transmitted tendencies—The range of (*a*) our physical potentiality; (*b*) our sychical potentiality—Practical suggestions.

X. INTUITIONAL AND SUPRA-RATIONAL ELEMENTS IN EXPERIENCE 196

Different uses of the term "intuition": (1) Naming the process of sense experience; (2) Naming the process and results of immediate judgment in dealing with the "self-evident"; (3) Naming the process and the power of transcending experience in arriving at new truth; (4) Naming the contact with Higher Reality, "supra-rational intuition"—Educating in the light of the higher capacities of the Self.

XI. A RÉSUMÉ 218

INDEX 220

The Unfolding of Personality
as the Chief Aim in Education

INTRODUCTION

THE unfolding of personality is due both to inner tendency and to outer influence and agency. In part the work of nature, it is in part also the work of education and of experience. Child-study and some of the newer aspects and methods of psychology are enabling us to know something more of the native tendencies of childhood and youth ; and this knowledge is directly available and helpful in the work of education.

Interest in education and, still more, participation in it can hardly fail to lead directly to a certain amount of child-study at first hand. It is necessary to say this. For there is no body of workers in the world's service who are more liable to receive advice from outside with the air of a right to give it, than are teachers. From the mother who ought to know something about children because she had buried eleven, to governing authorities of various kinds between whom diversities are legion, the advisers are many, and so are the, often mutually neutralising, kinds of advice. If only it were possible for the whole process to stop for three months and for everybody engaged in it, whether as givers or receivers of advice, to take time to think! Especially if under the leadership of students of child-nature

(from very various points of view) such as Binet, Dewey, Stanley Hall, Lloyd Morgan, Ribot, the late Otto Salomon, Francis Warner, we could study for even that brief period the nature of the child and know the direction of his powers! The question perforce arises: Is there any kind of ultimate authority or any basis of an ultimate authority anywhere?

Outside opinions, even opinions having august sanction, may very well fail us. Indeed, it would not be easy to find anything that should be done more diffidently than to suggest to a really earnest and conscientious teacher how to deal with a child, or than to prescribe a detailed routine of procedure to an enlightened head teacher. It is, no doubt, because of the world's long initiation in the art of educating the young that the best work is still done where there is least outside prescription; or where—which amounts to nearly the same thing—the internal strength of the school is sufficient to enable it very largely to shake itself free.

Where, then, is the ultimate authority? A three months' browsing in the pastures just indicated, accompanied by the taking counsel with ourselves which this would imply, would almost inevitably point to actual child-nature—the native and eminently cultivable elements of human personality—as the final court of appeal. What the child cannot learn we cannot teach him. That is a truism. But we do not so often stay to recall that what the child cannot now learn easily he might learn quite easily a little later on; and in the meantime he might be acquiring habits of mind and developing resources for which an equally good opportunity will not repeat itself.

Two aims run side by side in the following pages: to study, in the light of modern psychology, the native tendencies which form the original nucleus, and, as they develop, define the trend, of human personality; and to present incidentally a view of education which has the unfolding of personality as its central aim.

The latter part of the title of the book is taken from that of Herbart's great essay on "The Æsthetic (or Ethical) Presentation of the World as the Chief Work of Education." If a popular translation of this essay were published as a separate tractate, it would probably do more than anything else could to establish Herbart's fame amongst English readers. In it he develops with great philosophic skill the higher applications of Pestalozzi's doctrine of presentation as the basis of educational procedure. It is in effect supplementary to the work of Pestalozzi's other great educational contemporary and disciple, Froebel. Froebel did not overlook the value of presentation; but he started with a different view of child-nature, and was led to emphasise Pestalozzi's further doctrine of adequacy or efficiency as constituting more truly the educator's aim. To Froebel, presentation (*Anschauung*) was a means to the more inclusive end, adequacy or power in performance (*Fertigkeit*). As Pestalozzi had seen, the unfolding of personality is an outcome of the two interdependent processes—the development of the inner life and power, and the presentation of outer reality. Herbart and Froebel agreed with him in this, but with differing emphasis.

In view of the great progress that has been made, it may be taken for granted that teachers of the future will do far better work than we are doing or know how to do to-day. Smaller classes and greater "liberty to teach" in the elementary school; more care about principles and more concern for the duffer in the secondary school; more leisure to think and less dependence upon lecturer and tutor in the University, will be steps towards an education higher in value and degree at whichever stage it may be given.

SUGGESTIONS AND ILLUSTRATIONS.

1. "The civilisation of modern societies," says a French writer, "rests only on a superficial stratum, whose depth

will not be much increased by means of primary instruction as we understand it." We may compare this with the statement of Mr. Edward Carpenter in "Civilisation: its Cause and Cure," in which he says that civilisation is a disease from which no nation has ever yet been able to recover. But, on the other hand, there is the fact that no previous civilisations have seen anything like the same public effort to provide and insist upon universal education. Add to this fact that there is practically a world-wide freemasonry amongst teachers, and that interchange of information and opinion is constantly occurring, and may we not hope to learn how to educate in such a way as to deepen the meanings and moral values of civilisation, and so contribute to its "cure"?

2. "I think I have given enough evidence," says an English writer, "to prove that the question uppermost in the minds of these educational authorities is not: How, through our schools, shall we train a child? but: How, through our schools, shall we maintain an Empire?" Child-study, however, begins with the child. Will not an education which takes its departure from it attain both ends?

CHAPTER I

THE ORIGINAL NUCLEUS OF PERSONALITY

In the suggestive closing chapter of his "Psychology" the Danish philosopher, Höffding, says: "However far back we go, the individuals will start always with a certain organisation, with certain forms and powers which they have not themselves acquired. . . . At every stage of the great process of evolution there is a given basis, by which the effect of all experience is determined. . . . The external always presupposes the internal. . . . What is acquired is conditioned by what is originally innate. This is a fundamental relation that constantly repeats itself." This is true of all living things. It is the first chapter in their evolutionary history. Each has its primary nucleus in which is enfolded its future life-history, "after its kind." We are to see briefly how this applies in the case of human personality, and to point to the grounds on which we look back to some such beginning.

The whole of the facts of our lives consist of *what we experience*. These three words express a unity; but with a trinity of meaning or reference. Whilst the *experiencing* is our perceiving, feeling, thinking, wondering, wishing, and the like, and *what* we experience forms the contents of our perceiving, feeling, thinking, wondering, wishing, there is the presupposition, both in the experiencing and the contents experienced, of *ourselves*. *We* must be there to have the experience.

Logic and psychology are quite at one in this matter. People have become very shy of a logical reading of Descartes' famous *dictum:* "I think, therefore I am"; and rightly so, so far as the interpretation of his meaning is concerned. He was merely reading off from the page of his own consciousness what he found to be directly given there. He found that given in and with all our conscious experience is a direct consciousness of ourselves. We discover ourselves in the very activities of thinking, willing, feeling. Along with our experiences, that is, we have a direct intuition of ourselves as having them. This was Descartes' view; and it is in closest accord with the verdict of common sense. All that Descartes meant to say was: "*I, the thinker*, think." Yet the actual form of words used by him bears a logical interpretation. And, though we do not need to reason about what is already obvious and directly given, logic may quite well join hands with psychology in affirming the presence of a something original in all experience and as the pre-condition of all experience.

It is but a slight step aside from the immediate consciousness that we and our experiences are bound together, and are apprehended together, to say that an experience implies an experiencer. And this is, in effect, the logic of the case. It is of value to us, because we may work back from it in a way that—without the aid of logic—we could not work back from the direct intuition of our own existence. We can say, having in mind the growth of conscious experience and of the power of conscious experience in the race: Whensoever and howsoever conscious experience had a beginning, there must have been a being capable of having conscious experience for it to begin. Or, having in mind the growth of conscious experience and of the power of conscious experience in the individual: At whatever moment and in whatever form his conscious experience began, there must have been at that moment also the beginnings of conscious personality.

It is with the unfolding of the life of the individual that we are now concerned. Nothing can be more certain than this fact of an original nucleus or centre from which personality in its later developments grows. A member of any species is somehow pre-conditioned as a member of that species and no other. "When you come to think of it," says one writer, "there is something very remarkable in the fact that all dogs are dogs, whether Borzois or Toy Poms, whether whippets or Great Danes. Why this is I cannot understand: why they all, although so utterly different, should alike be dogs, with a vast groundwork of character identically the same, nor how they should all derive from a common ancestor." There, clearly, is a common centre, a basis of similarity, whereby dogs are dogs. Equally, there is a more complex basis of similarity between different dogs of the same species. This is but saying in other words that the creative process does not, however carefully at times it seems to recapitulate past stages, really go back to the most simple beginnings, to what we may call the amœba stage. The germ-cell from which one of the higher animals develops, however primitive in type and appearance, is laden with possibilities higher in kind and vastly different from those belonging to the primitive cell of the amœba. An embryo cannot, of course, develop without an environment; but it has, none the less, a life-history which is potentially present in some mysterious way even in its germ-cell, and which only waits to unfold. Each species has its own original nucleus of quality and tendency whence each member of the species derives a large and determining part of its individuality.

The higher the species the richer in range and in quality this original determining of its individuality will be. In his "Inquiries into Human Faculty," Mr. Galton refers to the complexity of man's character even in members of the lowest and most savage races. And speaking of mankind

qualities forming nucleus human

in general, he says: "Different aspects of the multifarious character of man respond to different calls from without, so that the same individual, and much more the same race, may behave very differently at different epochs. There may have been no fundamental change of character, but a different phase or mood of it may have been evoked by special circumstances. . . . Sudden eras of great intellectual progress cannot be due to any alteration in the natural faculties of the race, because there has not been time for that, but to their being directed in productive channels." In view of this large and varied capacity of response, the original nucleus of qualities and tendencies in man as man must be of immense importance in the determining of the nature of human personality. Mr. Galton's colleague in study has recently given the result of statistical inquiries in still more specialised form. Pairs of exceptional parents, says Professor Karl Pearson, tend to have exceptional sons in ten times the proportion as compared with pairs of non-exceptional parents. The difference between the exceptional man born of non-exceptional parents and the exceptional man born of an exceptional stock is in the fact that, if each marries an exceptional woman, the latter will have children on the average up to "the type of the stock," but the former's children will show "regression towards mediocrity." The general conclusion being that "the type or average of the stock is inherited, and passes on from generation to generation." In the words of Höffding: "At every stage of the great process of evolution there is a given basis, by which the effect of all experience is determined."

In the most general way we may ask: What are the qualities or tendencies which constitute the original nucleus of human personality? At least three perfectly general qualities may be traced. They are: (*a*) a spontaneous activity; (*b*) a tendency to develop along the lines, both

physical and mental, which are characteristic of man; and (*c*) a marked capacity to differentiate in response to the call of the environment, and thus to be modified by environment. In each case the principle applies that the higher the species, and the higher the stock or type or breed within the species, the richer both in range and in quality is the original endowment.

(*a*) The most important practical question with regard to the first of these original factors in personality is: Towards what are we thus active? Reserving to the next chapter the consideration of the close and constant mutual dependence of mind and body, we may here keep the mind and its activity mainly in view. We cannot conceive of mental activity apart from something that the mind works upon. So we find that Kant, with all his insistence upon the part played by mind, felt the necessity of postulating an external reality, or "things-in-themselves," failing to see how else to account for sense-experience. Self-activity not being, then, a process so complete within itself that it can conjure up its own materials as well as make its own constructions, we must look beyond the mind before we can have any clear conception as to what is meant by its activity.

And here, amongst other things, we have the fundamental reason for the provision of a school or college curriculum. It is of the nature of mind to be active in respect of that which is presented to it, on the two conditions that that which is presented comes within its powers and that it evokes its powers. Granted these two conditions the mind of its own nature tends to be active. As to this spontaneous activity itself, a word will be said at the close of the chapter.

(*b*) Given the presence of an interacting environment, the effect of the mind's natural activity is to raise the individual to the normal level of human intelligence. Just as the result of our natural bodily activity is the attain-

ment of a normal standard of physical development, so do we by the exercise of our spontaneous mental activities attain to a normal intellectual standard. The spontaneous activity, physical and mental, whereby from the first dawn of individual consciousness we respond to environment, tends all the time to make us men; *i.e.*, to develop body and mind according to the human type or standard. And here we have the real reason why the learner's approach to a curriculum that is within his powers and yet calls for effort should be by way of self-activity. The natural effect of the full and free use of his own powers, is to raise him to his due stature as an intelligent being. Denied the full and free use of his own powers he is in danger of being dwarfed in mental stature. This is the final plea for "self-activity" as a principle of method.

(*c*) The third of the tendencies which we trace back to the original nucleus is the tendency to take individual shape according to the specific experiences and the actual environment encountered. Our specific responses to our specific environment individualise us. In virtue of them we are ourselves, *i.e.*, have an individuality differing from other men's individuality. This is far from being solely a question of environment. The play of external forces, however varied, subtle, and persistent, can never completely account for the life-form either of genus, species, or individual. We may go back to the making of nerve-paths for the simplest way in which to illustrate this; and the illustration is appropriate, for in the differentiation of nerve-structure we have the physiological effect of all variations in experience—the physiological basis or counterpart of individuality. Is it not clear that the play of external forces alone cannot account for the making of specific nerve-paths? that there must be some *internal power of selection* whereby stimulations of a specific kind are appropriated by the nerve-grouping which is destined to become a specific sense-organ? How

could light-wave stimulations affect selectively the sensitive surface where organs of sight are to be slowly fashioned, and sound-wave stimulations the centres of a future organ of hearing, if the organism itself had no say in the matter? How, evolutionarily speaking, could a light-wave modification in the part which was the ultimate beginning of optic nerves and eye have held its own against, say, a sound-wave stimulation which might have challenged its right to the track? The *capacity to differentiate* is really postulated in any thoroughgoing evolutionary explanation. And this capacity is necessarily latent in the original nucleus whether we are considering the life-history of a genus, of a species, or of an individual. That is to say, the changes involved alike in the evolution of organic forms and in the development of individuals depend upon something besides the action of external forces. They are "phenomena of the internal character" of the germs and cells in which these high issues are being initiated.

Whether this modifiability is due to direct supplies of energy from a constant force—"some cause which transcends our knowledge and conception" (Spencer, "First Principles," § 62), or is in some equally mysterious way latent in the organism from the beginning, matters not in logic. Science, as has been often said, may take the latter view, since its work is not to push back to first principles. Philosophy may adopt the former alternative. Indeed, Herbert Spencer, who has had more than any one to say about the effect of external forces in producing differentiations of form, avows the need for the conception of an Unknowable Energy. And he continually transcends the strict pursuit of the evolutionary hypothesis by invoking this Energy.[1]

[1] Haeckel, similarly, according to Mr. McCabe, "does not teach"—"never did teach"—that the spiritual universe is an aspect of the material universe. . . . "It is his fundamental and

This, however, is in passing. The point we are considering is that the environment could not modify us if we were not modifiable through our responses to it. Such adaptability, or power to respond and to be modified by response, is necessary to the beginning of an individual experience. This is a persisting quality. And several questions arise from it for the educator. All his planning turns upon his knowledge that human personality is modifiable according to environment and the appeal of experience. The grading of schools and the educational aim and tendency of schools of different grade; the admitted duty—as much honoured in the breach as in the observance—of including adequate appeals to all sides of child-nature and child-capacity which make for human power; the spirit of the school discipline, and many other matters are involved in this great original fact, belonging to the being of man as man, that from the first moment of conscious experience onward through all conscious experience individuality is taking shape.

So far, then, the two vital considerations both for the philosopher and for the educator are the inner potency and tendency of the individual and the nature and effect of environing reality. Life is a product of inner tendency and outer conditions. This was well illustrated by Professor Sherrington, of Liverpool, in a recent address. He exhibited a muscle resembling the human biceps. "This muscle," he said, "has its place in the economy of nature, and into it it fits as a key into the lock for which it has been made. . . . Was the universe made to suit this little muscle or was this little muscle made to suit the universe? The

most distinctive idea that both are aspects or attributes of a deeper reality." He can call, therefore, upon his "law of Substance" for anything he wants, just as Spencer may call upon his "Unknowable Energy."

problem concerning this muscle and that concerning man are, in so far, the same. Surely our answer is that the muscle and the rest of the universe fit each other because they have grown up together—because they are part of one great whole; they fit just as a lock and key fit because they compose one thing, and it is pointless to ask whether the lock was made to fit the key or the key the lock."[1] So, although in the following chapters the whole inquiry turns upon the unfolding, especially in a psychological sense, of man's personal life, his relationship to environing reality is pre-supposed throughout. The self and the universe are not divided. The ultimate nucleus of human personality, and with it the rich succession of nascent tendencies, which unfold from it from stage to stage in our individual progress, fit the universe and the universe fits them.

It would seem possible, therefore, to assign a fourth fundamental quality or tendency to the original nucleus. For this mutual fitting of the self to the universe of reality and of the universe to the self is somehow prophetic of an abiding harmony. This possibility is for the self—and perhaps for the universe also—of the nature of an Ideal. The Ideal may thus be said to dwell within us as an inherent part of our being—an ideal so varied and far-reaching in character through its relation to the whole of our contact with the universe of matter and of spirit, that it need not surprise us if we find ourselves incapable of realising it in a short lifetime of finite experience. As might be expected, this presence of the Infinite or the Ideal with us gives rise to difficulties and even to seeming contradictions. The finite character of our experience and of our progress and the infinite nature of the Ideal which is somehow born within us and which bears us company are not easily harmonised. Professor Mackenzie has dealt penetratingly

[1] From a paper read before the Royal Institution and published in *Nature* for April 16, 1908.

with this difficulty.[1] He sees that our consciousness, though in a sense finite, can identify itself with the infinite, and that though this carries us beyond the finite centre of individual consciousness, "yet it is the ultimate point of reference for the individual consciousness." If our ideal self is in any true sense our self at all, it may be asked, Why does it always dance in front of us, so that we never come up with it? This is the "difficulty of an Infinite Ideal combined with a finite consciousness," and an Infinite Ideal supposed to be in part "constitutive of our consciousness." Professor Mackenzie meets the difficulty by admitting that a contradiction remains in individual personality between the infinite and the finite side. Whilst finitude belongs essentially to human personality, which is connected with a particular animal organism, "the infinite side belongs to us as truly as the finite side."

The seeming contradiction applies, as Professor Mackenzie shows, equally to the divergence between human knowledge and ideal reason. The only question is as to whether it is better to speak of a contradiction between the infinite and the finite side of our personality, rather than to view the fact that realisation falls short of the ideal as a result of the gradual unfolding of our personality. There would be no contradiction in saying that even the original nucleus never completely unfolds in the course of our finite experience. The only way of making this into a contradiction would be by saying that there cannot be more in the original nucleus than we actually see unfold; and this, by his whole-hearted inclusion of participation in the infinite by human personality, Professor Mackenzie seems clearly to disallow. There is no real contradiction in the fact that the whole sum of developing tendency falls short of the goal of perfect development. Even in full consciousness of the divergence between our attainment and the ideal

[1] In an article in *Mind*; new series, vol. iii.

possible to us as self-conscious beings, we may harmonise the two in the idea of growth and progress. Even our highest conceptions of the ideal are charged with an impulsive energy.

A valuable and for our purpose sufficiently inclusive and workable idea of the original nucleus is provided by thinkers of such different schools as Caird and Spencer. "The inmost secret of each man's heart is the secret of the whole world," says Caird. And Spencer speaks of "the *I* which continuously survives" and is the subject of our various experiences as "a portion of the Unknowable Power." This Spencer urges in order to meet the need of a principle of unity and of continuity within human personality; for he sees that "the aggregate of subjective states constituting the mental *I* have not in themselves the principle of cohesion holding them together as a whole." Behind the "mental *I*," the acts and facts of mind which make up our experience, there must be some primary nucleus or soul, one in nature with the universe, as Caird says, or, as Spencer, a "portion of the Unknowable Power." Thus viewed, we have the image and superscription of universal reality stamped upon human personality from its first unfolding.

> "A spark disturbs our clod;
> Nearer we hold of God
> Who gives, than of His tribes that take,
> I must believe."

But difficulties are not to be avoided. In thus affirming the ultimate unity of the inmost self and the universe, we are soon face to face with difficult problems. Whence comes error? Whence comes evil? Are our actual environing conditions typical of the purpose and meaning of the universe? Is there a true self discoverable which can pass through all unchallenged? It may be that philosophy only finds answers to these difficulties when as an interpreting

angel it enters the domain of spirit, making religion itself more realisable to many by its discourse. The mystery of disharmony, side by side with the moving of the Ideal within us, may find its solution in a right attitude of the personal will. The self can become the ally of the universe, link itself in thought and will and feeling—but essentially in will—with the All. Indeed, the belief in this possibility is the mainspring of the universal religious impulse. This appears to be the meaning of the Ideal. The inner self or soul and the universe are not divided. In our inmost being we are and remain bone of its bone and flesh of its flesh; so that in knowing ourselves, in knowing mind or man, we so far touch the centre of things, and know reality almost at first hand.

If we call man's capacity for the Ideal a fourth quality or tendency, immanent in the primary nucleus of human personality, it will be in view of the fact variously expressed by Caird, Mackenzie, and Spencer in the quotations already given. Many names might be added and passages quoted to show that philosophy is by various paths arriving at a spiritual interpretation of reality. Man from this standpoint lives and moves and has his being in a universe of spiritual reality. "The inmost secret of each man's heart is the secret of the whole world." "The infinite side belongs to us as truly as the finite." "The *I* which continuously survives is a portion of the Unknowable Power."

Probably no further explanation can be offered of the bare fact of our mental activity, or of our having a life-history as thinking, feeling, self-determining beings, than this. We are portions of the Supreme Energy, partakers in the spiritual nature of the universe. His first being and fundamental character, the genesis of his personality, man derives from something akin to himself, though infinitely higher than himself, in the universe. This is his Alpha—the primary nucleus, as we have called it—of human personality.

From this same source, and because he is a conscious receiver of the impress of the Whole, man has ideals or an Ideal, inalienably rooted in his consciousness of himself. This is his never-attained Omega. Between this Alpha and this Omega lie all that comes to him through the self-active tendencies, the instinctive impulses, of his nature; all that comes to him as his education; the whole, indeed, of his sought and unsought experience, which is in effect an education whether he will or no.

SUGGESTIONS AND ILLUSTRATIONS.

1. The suggestion of an original nucleus is somewhat cursorily made in this chapter, as the main purpose of the book is less to theorise than to present results which have a practical bearing. For further reading, either the last chapter in Höffding's "Psychology" (Eng. trans.), or Ormond's "Foundations of Knowledge," may be suggested. But one of two things must be allowed;—either that the potentiality of progressive acquisition is somehow infolded in a primary nucleus—actually there in the germ, or that the original nucleus (for some starting-point has to be postulated) is such as to be capable of progressively receiving fresh influxes of energy from outside.

2. By way of a real beginning in child-study, we might by observation and inquiry frame for ourselves an answer to the question: In what way does the tiniest infant manifest that he is alive?

3. A useful suggestion is given by Dr. Percy Nunn, of London University, to the effect that the term "self-expression" is too frequently taken as meaning that the "self" is something already existing within the young child and only waiting to be "expressed." It would be more true, Dr. Nunn says—and it will be readily agreed that it would be *equally* true—"to say that self-expression is a movement *towards* a self—a process in which the child (to use

Mr. Kipling's phrase) finds himself." Perhaps the truth that combines the two views is that activity, which is the child's great method of self-expression, is also one of his great methods of gaining experience. In his experience, the child certainly realises or "finds" himself.

CHAPTER II

THE SELF-IDENTITY OF AN UNFOLDING PERSONALITY

CHANGE is implied in the unfolding of personality from stage to stage. If, therefore, we are to speak of the same self throughout, it must be a self that maintains its identity in spite of this continuous change. Moreover, our very consciousness depends on change. It has long been admitted that to have always the same consciousness (were that possible) would amount to the same thing as not to be conscious at all. If, for the sake of experiment, we try to fix our attention upon some external object in order to maintain an unchanged field before the mind, we almost immediately find some re-arrangement taking place. The object is either displaced from the centre of attention by some other object, or it suggests some train of associated ideas. We may with an effort recall the mind to what was a moment or two ago before it, but it is already to a partially changed field—at best the old field with a new atmosphere about it and a certain fresh interest pervading it. And no sooner have we effected the recall than the mind moves on again, and fresh ideas or objects gain possession. From this continuous movement of consciousness the mental life has been described as a "stream" of consciousness.

Here, then, is change both as implied in the unfolding of personality and as implied in mental activity. How can we harmonise with these conditions of change our consciousness of an abiding personality? From moment to moment

there has been change, yet we believe that we are the same persons that we were ten years ago, in childhood, even at birth. How are the two things to be reconciled? It is clearly one of the first problems to be faced in connection with our consciousness of our own individuality to see what really is involved in this "reference of a manifold which is continually changing to a common centre which is relatively permanent."[1]

The suggested solutions vary considerably. The previous chapter has led up to the view that this common centre need not be, as some have described it, absolutely and unchangingly permanent—"a pure unit," or "a simple and indivisible point." Such a common centre would be in danger of finding itself in the forlorn condition of Euclid's point: that is to say, having "no parts and no magnitude," it would find it difficult to come into effectual relationship with anything actual, and difficult to prove itself, or even to realise itself, to *be* anything actual. What is abstract cannot be fundamental. This view of an "absolute" self, a common or unifying centre of all experience which itself undergoes no change, is yielded by the endeavour to interpret everything in terms of intellect. Persistent analysis will, of course, yield us certain ultimate abstractions. But pure abstraction is a *cul de sac*. It leads to nowhere beyond itself. The self of experience has in it more than the pure unity of a simple and indivisible point. Indeed, viewing the self as a pure unit, or as having as its element of unity a simple and indivisible point, we easily run on to rocks of difficulty. So we read in the work from which these descriptions are taken:[2] "The permanent element which

[1] Mellone, "Philosophical Criticism and Construction," p. 228.

[2] McTaggart, "Studies in Hegelian Cosmology," see pp. 81, 82, 83, and pp. 38–39. The author is, of course, careful to admit that such indivisible elements cannot be thought of as able to exist by themselves.

persists all through change does not explain that change away, or render it less perplexing. But the permanent element does exist, and it is in respect of that element that, in spite of the change, we ascribe personal identity to the changed person. The question presents itself—unfortunately without an answer—how a permanent and changeless character comes to develop itself in time and space. But this is only part of the large problem—equally insoluble—how change of any sort is possible, when the ultimate reality is a timeless absolute." If, once more to refer to Euclid, we were to argue by analogy from Euclid's method of *reductio ad absurdum*, the moral of which was to change the hypothesis, might we not say that a first postulate in philosophy, which leaves us with unanswerable and insoluble problems just where it is of most vital importance to have some sort of answer, also needs reconsideration? It is impossible to see how any self-consciousness at all could arise in connection with such a centre. The original nucleus of personality must be of such a nature as not to be above the admission of relativity and change, if it is to be a true basis of experience which consists in change.

In this and the following chapters the problem will be taken up from various points of view, the discussion of each tending to the same answer, namely, that change and unfolding are not incompatible; but rather that they are but two aspects of the same fact. If there be, as it seems necessary to think, a primary nucleus in any way resembling what we have been describing, and if from this primary nucleus as starting-point experience develops and personality unfolds, then it should not be impossible to see that primary tendencies may persist though the actual details of our life-history are always in progress. Some of the standpoints from which this problem of *the permanence yet progressiveness of ourselves* will be considered are the following:

(1) The fact of man's being a compound organism of

mind and body, and the suggestion thence arising of a permanence of his mental being.

(2) Man's organic unity in his more distinctive character as a psychical or spiritual being.

(3) The mental process (*a*) as a blending of instinct with experience; (*b*) as continuous; (*c*) as implying self-determination on the part of the self.

(4) Some of the phenomena commonly referred to as belonging to the "sub-conscious" self.

The first two of these form the subject of the present chapter.

(1) As to man's being a compound organism of mind and body, the fact is somewhat feelingly put to the proof in the illustration of the schoolmaster caning one boy as distinguished from his caning a row of boys. If six strokes are given to six boys they have "similar feelings, but no continuous feeling." If the six strokes are given to one boy, he has continuous feeling, through which the intimate association of his mind (or state of feeling) and his body is clearly evidenced. Montaigne, in one of his piquant references to education, says: "'Tis not a mind, 'tis not a body, we are building up, but a man; and we ought not to divide him." And such popular expressions as "a healthy mind in a healthy body" (with which Locke opens his "Thoughts on Education," and which he retains as his text for a considerable part of his treatise) show how fully the fact of man's being for all practical purposes a psycho-physical unity is appreciated.

The physical part of man's being counts for much. All mental processes have a physical accompaniment. The nervous organism takes shape in accordance with these mental processes, the effect being practically permanent. Further, in spite of change in the atoms of which our bodies are composed, there is a real sense in which we retain the

same body. We find illustrations of this in mere details. A child gashes his cheek by falling on the point of a pair of scissors, or a schoolboy receives a hack on the shin at football, and the scars remain through life. This permanence of bodily configuration, along with the fact that the changes are infinitesimally gradual and vary in rate (the bones changing with least rapidity), gives to the body we have in middle life a tangible identity with that which we had in childhood. Now, if we add to these two facts of nerve-modification and permanence of bodily configuration the further fact that physiological dispositions have a decided effect upon the thoughts, we may expect that there will be a projection from the physical on to the mental plane, which projection, being consciously or sub-consciously ever present, contributes its quota alike to the fact and to the assurance of permanency. The very persistence of memory depends very largely on the persistence of the same organic conditions. If we had shifty bodies we could hardly expect to have permanent souls, or at any rate to know that we had them.

Side by side with this is the fact that the main modes of mental activity remain fundamentally the same throughout our conscious experience. Desiring, deliberating, willing; feeling, emotion, sentiment; perceiving, imagining, reasoning, are features of mental activity, the forms of which undergo little change, though, of course, their contents change indefinitely. The products of these processes also tend to be stable. This general identity of processes and stability of products is also bound up with the intimate association of mind and body. Man, in a word, is compounded of mind and body: and in the known stability of form and capacity of the one we have a foundation for and a clue to the continuity and permanence of the other. "Body, as such, is not soul, nor, again, does body 'act on' soul, nor soul on body, as two separate 'things' on

one another, but their changes are interwoven as connected phases in the complex constitution of the greater whole of which both are elements. And this whole is the real self."[1]

(2) Man is, however, distinctly a psychical being; according to definition, a "rational animal." And, in accordance with a well-established biological principle, he attains in virtue of his higher nature to a higher form of unity.

It is not quite adequate to say (even in distinguishing mental unity from organic unity) that "an oyster is just as much an organic unity as a philosopher."[2] Whilst willing to start by saying that a philosopher is *at least* as much an organic unity as an oyster—and what permanence we ascribe to the oyster as a biological unit, we perforce and for the same reason ascribe to the philosopher—we must go on to say that man is very much more of an organic unity than an oyster. The difference between them, of course, turns upon the higher complexity of man as an organism. To take a mechanical illustration: compare an orchestra of to-day with an orchestra of, say, a hundred years ago, and in the greater variety and delicacy of the instruments, on the one hand, and the vastly richer harmony derivable from them, on the other, we see the possibility of combining greater complexity with higher unity. So, in living organisms, the higher the differentiation the higher and more complete the unity. And the higher the unity, the more real and effectual is the continuity.

Regarding man as a possessor of mind, the unity is still more marked. As Augustine says: "I exist, I am conscious, I will. I exist as conscious and willing, I am conscious of existing and willing, I will to exist and to be conscious; and these three functions, though distinct, are inseparable, and form one life, one mind, one essence."

[1] Hobhouse, "Theory of Knowledge," p. 873.
[2] Ryland, "Psychology," p. 36.

The mental process that is involved in the unfolding of personality is to be treated of in later chapters. Just one point may be referred to here. The very fact that I can "will to exist," still more that I can "want to be myself only higher," becomes significant in connection with the permanence of the self. It would seem that a self-conscious self, at the centre of whose being is will, which has an intuitive consciousness of personal identity, has, in this very consciousness of a self-identity which it wills to maintain, a factor which tends to conserve its identity. The self seems to be charged with a sort of tutelary responsibility in respect of its own being.

As to the problem with which the chapter started, the argument so far goes to show that the harmonising conception, which binds together the superficially opposite ideas of permanence and change, is that of growth. Growth, as has been well said, is a reconcilement of permanence and change. Organic identity is preserved in the midst of, even by means of, vital processes. The higher the vitality the more real the unity and the richer and broader the continuity.

This reconciling conception of growth so closely fits the case that it might be worked out in considerable detail. To take up one of its applications. Room is left for a traceable self-identity over distinct periods by the fact that growth is always gradual. In the process of the unfolding of personality, an average may be struck over an appreciable period which may be regarded as the self of that period. It is true that Mr. Bradley, in "Appearance and Reality," argues that an average self extending over appreciable periods is inadequate ground for an affirmation of continuity or permanence. This would have to be admitted, if the average self of one period stood in no real relation to the average self of another. But if my average self, say of the period between the ages of thirty-three and

thirty-five, looks back towards and can establish relations with my average self of from twenty-three to twenty-five, and that self with the average self of from thirteen to fifteen—surely, one of the postulates of education ; then the discovery of average selves over appreciable periods, in the light of this connectedness between those selves, becomes significant of continuity, a continuity which is a realisable form of permanence. Mr. Bradley is too strict in his definition of the true self. Starting with a felicitously phrased definition of a man's normal or average self as "the usual manner in which he behaves, and the usual matter to which he behaves, that is, so far as he behaves to it," he finds, of course, instability or change alike in manner and in matter. As for the matter to which he behaves: "A man's true self, we should be told, cannot depend upon his relations to that which fluctuates." As to the behaving self: "If you take an essence which can change, it is not an essence at all." Unless, one may add, it be of its essence to change. For is it not of the very essence of a living organism that it can change? If it could not it would not be a living organism. And if this be so, that to which it behaves also, its environment, must be subject to change. For a changing essence in an absolutely unchanging environment is unthinkable. So, whilst one might be content to follow Mr. Bradley in regarding the conception of an average self as merely tending in the direction of the essential self, but as falling short of its discovery, it does not seem necessary to reject so much as he does. Mr. Bradley seems to throw overboard all that can finally yield us an essential self in arguing that an average self fails to yield it. This is the more remarkable, as he goes on to show how little inclination he has for a self that is a pure abstraction. "Assert, what you are unable to show, that there is still a point untouched, a spot which has never been invaded. . . . This narrow persisting element of feeling or idea, this fixed

essence not 'servile to all the skyey influences,' this wretched fraction and poor atom, too mean to be in danger —do you mean to tell me that this bare remnant is really the self? The supposition is preposterous, and the question wants no answer. If the self has been narrowed to a point which does not change, that point is less than the real self."[1]

For a more concrete and richer conception of the self we must seek, therefore, some interpreting idea which leaves room for change. Growth gives this more concrete conception. For growth is not only compatible with change, but definitely implies it, connecting and unifying successive phases. "Man partly is, and wholly hopes to be," is one of the most vital and convincing ways of saying that man *is*.

So far, then, we have passed from the fact of the permanence of nerve modifications which accompany and underlie our mental history, through the conception of man's organic unity, both as a compound organism of mind and body and as a psychical or spiritual organism, to the idea of progressive development or of change as growth. We may briefly touch upon one further argument, namely, that self-identity is expressly implied in any form of self-determination. If the self consciously determines its own changes, then to whatever length the changes may proceed, it may be regarded as still being the same self. For the conception of the changed self was adopted and endorsed, was actually conditioned stage by stage by the self, before the changes occurred. A classical illustration which may serve us is that of Sir John Cutler's silk stockings, which were darned with worsted until none of the silk was left, and the question arose as to whether they were the same stockings, or were they new ones. On one of the counts just enumerated the transmuted stockings could put in a claim of being identical with the

[1] *Op. cit.*, pp. 78 to 81.

original pair. The change had been gradual, and there had been appreciable periods of wear during which a definite proportion of worsted to silk passed muster,—even though from period to period, *i.e.*, on the occasions of the successive darnings, the proportion of silk to worsted grew less and less, and at last reached vanishing point. But this by itself might be said to be quite as much a gradual loss of identity as a maintenance of it stage by stage. It would seem necessary to be able to add a further condition, that the stockings either under some organic necessity (imagining them to be organisms, for the sake of argument) had darned themselves, or had themselves willed to be darned, with worsted, before we could validly endorse the claim to identity. Because, even when the last thread of silk was gone, they had themselves—for good reasons in such a case, no doubt—determined upon a worsted as opposed to a silken career. "The Becoming or Change of qualities consists in one quality disappearing in order to give place to another which comes after it; the thing, the individual, does not in changing simply cease to be,—it ceases to be in one respect or mode in order to be in another. There is no contradiction in that a thing may both be and become."[1] So, if a present self foresees and predetermines a future self, the present self is by that very fact carried forward into the future self; and, on the same condition, every future self is in part a past self, or is part of a past self, brought forward. The willing of the present forestalls the self of the future; the self of the future fulfils the willing, that is, fulfils part

[1] Mellone, *op. cit.*, p. 162. So Höffding: "Even when the prevailing elements of consciousness are not the same throughout the whole of life, but different at different stages of development the formal unity may be still preserved, if the transition from one standpoint to another is *continuous* and *consequent*. A mental revolution does not destroy the unity of the self if (like most revolutions) it is but the outcome of a process long carried on in secret' ("Outlines of Psychology," Eng. trans., p. 140).

of the self, of the present. One may sum up, drawing together both difficulties and conclusions, in the words of Professor Hobhouse :[1] "The self, then, to me is real, though we do not know the whole of its reality. I do not question the reality of the self because I am unable to assign a point of persistent identity within it, reconciling its differences. I believe some such identity to be postulated by the facts ; but even if it did not exist, if all the soul's being were change, whether cyclical or progessive, I should not on that account take it to be unreal. It would be a real process instead of a real persistent fact, but it would be none the less real."

SUGGESTIONS AND ILLUSTRATIONS.

1. "Everything mental is referred to a self."

2. For further reading on the lines of this chapter Dr. James Ward's article on "Psychology" in the "Encyclopædia Britannica" (9th edition) might be referred to. The words just quoted are taken from it. Other books that are easy of access are : Baldwin's "Story of the Mind," and his larger works, "Mental Development in the Child and the Race" and "Social Interpretations of the Principles of Mental Development" ; Lloyd Morgan's "Comparative Psychology" ; McDougall's "Physiological Psychology" ; Stout's "Manual of Psychology" ; Höffding's "Psychology" ; Judd's "Psychology."

3. As to the co-operation of the educator with the progressive development of an unfolding personality, a good deal of emphasis should be thrown upon nascent periods and nascent tendencies within the life of his scholars. Nascent tendency is really a name for the growing phases of organic life ; and whilst growth in any specific direction is in progress, accelerating and directive aids are particularly effectual. If we wait till the normal nascent period has

[1] "Theory of Knowledge," p. 576.

passed and then seek to educate along these lines, we are dealing with an organism which cannot well keep time with our efforts. Educative influence is brought to bear most economically when it times itself to some onward swing or tendency of the organism.

4. Dr. J. W. Slaughter speaks of the system of education inaugurated in 1870 as following the industrial revolution whereby "men and women found that they were being mechanicalised and contemplated the same destiny for their children. The demand went forth that the worker's child should be provided with the instruments of knowledge through which it was thought the storehouses of human culture would be made accessible. Since that time the children of the nation have been trained in reading, writing, arithmetic, but we are now discovering that they are no better off than their fathers. Ability to read does not make a scholar nor ability to write an author. Eight of the most plastic years of childhood are sacrificed to training in these processes which, increasing evidence shows, can really be mastered in a few months. This waste of human material has gone on because of the persistence of the conception of mind as an independent entity existing within the body, with which it has no essential relation, and as constituted by a bundle of faculties which only require exercise to be brought to their full use."

5. Mind and body co-operate in the unfolding of our powers. The body is constantly receiving enrichment, intensifying and refining its discharge of function, through its co-operation with mind. A well exercised and vitalised brain is a source of health, and even tends to longevity. The progress of mind involves a heightening and enrichment of the service which the body renders.

6. The educational process is, by common consent, finding its analogies, not in the mechanical, but in the biological sphere. Merely to have become sure of this is a great step

forward. It means that we regard the mind as having an organisation and a way of its own, and so are appealing to and utilising its powers of assimilation. To a similar effect Spencer contrasts *unorganisable* facts with the kind of knowledge which alone can be really acquired, *i.e.*, organisable knowledge. The child is swayed by inner imperatives even as a learner.

7. Biological metaphors are now, therefore, common. "Nutriment" was a word often on the lips of the late Professor Withers, when speaking of teaching-stuff. "Mangers without hay do not feed," said Thring.

CHAPTER III

MAN'S INSTINCTIVE TENDENCIES: (*a*) MOTOR TENDENCIES

SOME readers, including perhaps the majority of those whose interest is a practical one and who take up any book dealing with education with a practical aim, will prefer to glance very casually at the two preceding chapters and to begin their reading at this point. Yet there is a direct connection between the study of instinct upon which we now enter and the preliminary study which has preceded. Immediately that we define instinct, we find that its special feature is that it is a native tendency, wholly unlearned. This at once relates it to the primitive tendencies spoken of in the first chapter. The next thing that we find is that instinct is always of the nature of an active tendency. As such it links portions of our experience together on the lines of the organic tendencies referred to in the second chapter. We find, moreover, that our instinctive tendencies remain with us. Our instincts are thus a first definite showing of the presence of permanent factors in the making or unfolding of our personality. Instinct is at the very foundation of all our experience. None the less it exerts an influence, sometimes an overmastering influence, in all our later experience.

It follows that a knowledge of man's instinctive tendencies is of considerable importance to the educator. In the study of them the theoretical and the practical aspects of our inquiry hold well together; and we shall begin at this

point to see with some definiteness that the unfolding of personality may justly be spoken of as the chief work of education. The practical outcome of this part of the inquiry will be to discover what we have in the way of native endowments to build upon, and to build with, in our effort to direct the intellectual and moral development of the child.

Child-study has led us far away from the once much-discussed view that the intellectual and moral nature of the child is a something which his experience gradually puts together within him, and that we, his teachers, in co-operation with the rest of his environment, practically *make* him. The process is not, to quote a time-worn metaphor, like the filling of an empty cabinet. The truth is rather, as Ruskin with characteristic over-emphasis states it, that we cannot manufacture a man, but that the utmost we can do is to "dig him out, nugget-fashion." And Charles Lamb: "Children have a real character and an essential being of themselves." In so far as these are right, it is worth the educator's while to know something of this real character and essential being. Yet we have not to read very deeply into the history of education to find how strong a hold the idea of the mind of the child as a sort of cupboard, which depends for all it contains upon what we put into it, has had of the educational mind.

Indeed, although the master tendencies in education to-day are practically a blending of the two standpoints, extremes are even yet not unknown. For example, one world-famous American school was trying some ten years ago, when the writer visited it, to give the child as free a fling as, with adult interference at its very minimum, school can possibly allow.[1] Such a school method evidently expresses a firm

[1] The Elementary School initiated by Professor Dewey at Chicago—a school great in its influence in many valuable ways. See Dewey's "School and Society"; and Board of Education

belief in an original bias within the child towards knowledge and morality. If our motto were to be *nothing by prescription, everything by experience*, it could only be so because we believe that it is safer to let the child alone—safer, because Nature (a something, *i.e.*, moving and energising within him, *his* nature) can best conduct him to manhood's goal. Another equally famous American school [1] aims at well-graded moral instruction, and gives such instruction quite admirably alike in the form of direct teaching and indirectly by the bearing of this special instruction upon other portions of the school work. Of the two factors emphasised by Plato, the former school lays the greater stress upon *nature*, the latter upon *nurture*. But the two views, Plato already being witness, are not by any means exclusive of each other. And, whichever view of education more attracts us, we may yet find advantage in being able to answer the question: What is there in the very build or predisposition of the child, which may give us our point of departure and proffer guidance in our efforts to educate him?

The fundamental dogma of the Rousseau-Pestalozzi-Froebel school is that the child is alive. More variedly alive than any other animal, his behaviour is proportionally varied. He is endowed with a brain and nervous system which give him an almost infinite capacity for variations in responsive activity. He is a "behaving organism." An imperative is born within him—to do, to learn by doing, to live by doing.

Special Reports on Educational Subjects: vol. x., "Moral Education in American Schools," and vol. xi., "Education and Industry in the United States." This historically interesting school is still doing important work under changed auspices, and Professor Findlay's editing of two volumes of Dewey's Educational Essays is itself testimony to their value.

[1] The Ethical Society's School in New York City. See Adler's "Moral Instruction of Children" and the two Board of Education Reports just named.

The terms, familiar by long usage, which have been employed not only in philosophy but in common speech in reference to man's original endowment are "instinct" and "intuition." Partly to show what recent light has been thrown upon these two aspects of our mental life, partly to indicate the part to be assigned to them in the process of education, these are to be dealt with in some detail.

And first, as to instinct. As we shall see, "instinct" is far from being a well-defined term. Popular usage has tended to make the words "instinct," "instinctive" almost synonymous with what is spontaneous and unpremeditated, without considering whether the spontaneity is original, *i.e.*, really instinctive, or is the result of habit. Very much in the same way as a village repairer of property spoke of himself as having been a "native" of the village for nine years, has popular speech used the terms "instinct" and "instinctive" in describing what has become habitual through experience. The terms will be here used exclusively to denote the fact of our being natively endowed with certain capacities of responding to the outer world; to the events, the people, the things which constitute our environment. These inherited impulses we call instincts. We possess them independently of any kind of teaching by others or of any kind of learning by our own experience. They are "unlearned reactions," or "untaught ability."

It is customary to emphasise the part which instinct plays in the life of animals. In animals, instinct so predominates that the greater part of their behaviour may be said to be born with them. The bee, for example, takes wing, seeks honey, carries it, makes hexagonal cells in which to store it, and lives the wonderful life of the hive, because it is, so to say, born to it; one bee to one task, another to another. Another kind of animal is born to come out after dark;—good reasons lie behind this, of course. Though it has no eyes, it starts away with amazing rapidity at the approach of

a light; incidentally, it improves bad soil and destroys good roots: all by instinct. With this display of automatism we have been accustomed to contrast man's prerogative of reason. His very mistakes he can turn to advantage by using his intelligence in learning to do better. Marked though the differences are, our purpose will not be greatly served by pointing a contrast between man and the lower animals, for we shall learn more from the analogies than from the contrasts. It is evident that in speaking of the child and his instincts we are asking: What is the child born to do? And, at what stage in his development may he be expected to do this rather than that by sheer nature?

One important thing to notice, however, is that the variety of movement that is possible depends on the complexity of the organism. A child is born to completer and more varied behaviour than a dog.[1] His very make, so much more complex, especially in the matter of nerve

[1] We might compare man in this respect with still less highly developed animals, *e.g.*, the farmyard fowl. In a series of observations on animals by Margaret Benson, entitled "The Soul of a Cat" (Heinemann), the writer says that fowls are liable to be misjudged because of the roughness of the instruments they have at their disposal. "If a chicken falls on its back the only instruments by which the hen can help it to regain its feet are a beak and a claw. . . . She first pecks the chicken to stimulate it to exertion, and then she turns and kicks it. This latter plan is usually the more successful. . . . In case of hostilities the hen has only the same two instruments at command. She first pecks her foe and then kicks him. . . . In the same way, if a hen, called suddenly from an orgie of herring-heads in the farmyard to a meal of corn in her own enclosure, forgets where the gate is and tries to get through the wire-netting, the cock has only one possible method of helping her. He flies at her from the other side and pecks her. This is not hostile, but protective; he is helping her to recover her self-control. When he has succeeded in reminding her that she cannot hope to get through galvanised wire-netting, he will accompany her politely round to the gate and bring her to her food."

development, is the proof and guarantee of this. Yet one of the difficulties awaiting the student of the subject is the apparent contrariness of the statements he comes across. He finds some saying that in man "the number of definitely instinctive activities is few"; that man is distinguished from the lower animals by the fewness of his instincts and by his dependence upon reason. Others he finds saying that "man has more instincts than any other animal, but the variety of action thus made possible, and the modification produced by experience, make it seem as if he had none." The writers who find in man fewer instincts than in animals are those who define instinct as fixed, invariable, unerring response. And it is clear that if we regard man as born to many things that he must do, cannot help doing—fixed, fatal, uniform ways of responding—on the one hand; and if we regard him as gifted with intelligence and as placed in a constantly changing environment, on the other, we may expect collision and confusion. The fixed parts of him will be always clashing with the adjustments he is under the necessity of making to varying circumstances. But allow that instinct is not fixed, invariable, unerring; noting that even the chick does not direct its aim accurately the first time it pecks, but has to acquire accuracy; and there is ample room for the statement that man is more highly organised for behaviour than any other creature, and has the greatest number of instincts, *i.e.*, of tendencies born with him towards specific modes of behaviour.

In treating of the range of the child's instinctive tendencies, it may be serviceable (though, admittedly, quite arbitrary) to follow lines which psychology itself suggests; and, whilst remembering that elements of feeling, acting, and knowing are always together present in all our conscious experience, to consider man's instinctive tendencies in three groups according as one or other of these elements is specially prominent. This may be done for convenience,

although by definition the characteristic quality of an instinct is that it is a reaction, *i.e.*, a form of behaviour. We thus have the three following groups :—

(1) Unlearned reactions, in which we trace little more than modes or ways of *behaving*.

(2) Unlearned reactions, which have large and characteristic accompaniments of *feeling* ;

(3) Unlearned reactions, which seem to have the gaining of *knowledge* as their most direct aim.

All these we find in the child.

We may take first the unlearned reactions which, though there are accompaniments of consciousness, are for the most part modes of behaviour.

We are not concerned at this point with any discussion as to the origin of instincts; but merely to know what instincts the child has and what part they play in the upbuilding of his personal life and experience. The organs of behaviour, if one may use the expression, are nerves and muscles. Acting conjointly they form the nervo-muscular, or, as it is now more often called, the "sensori-motor," system of the species in question. It is customary to trace three levels within man's nervo-muscular or sensori-motor system. A brief account of these will show something of the way in which the bases of man's efficiency as a practical being are laid in his very build as a compound organism of mind and body. The sensori-motor arcs of the lowest level are the physiological mechanism of all purely reflex actions. These help on the more purely physiological plane to preserve the life of the organism. If, for example, at the first stimulation of the nerve-endings in the hand or foot or some other part of the body by a red-hot substance or a flame I did not instantly recoil, the penalty might be loss of limb or even loss of life. But in order for this prompt reaction to be possible, two distinct steps forward have been taken in building up the nervous system. From the simplest

possible form of nervous system, such as that of the jelly-fish, which consists of a few nerves running directly from nerve-endings to muscle (diagram 1), we have passed to a structure with a definite centre, the function of which is to receive and to transmit in such a way that the stimulation of in-carrying (or "afferent") nerves leads to an excitation at this centre of out-carrying (or "efferent") nerves, which, through their attachment to the appropriate muscle, effect the responsive movement. The nerve centre connected with reflex movements is the spinal chord, represented in section (s.c.) in diagram 2. The muscle in

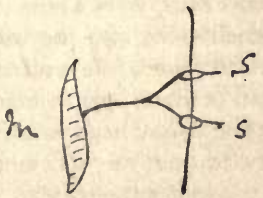


DIAGRAM 1.

Where s = sensory cells on the surface or skin; and m = muscle.

DIAGRAM 2.

Where s.c. = section of spinal column; s = sensory cells; and m = muscle. (See McDougall, "Physiological Psychology," p. 17.)

diagram 2 is supposed to be attached to a bone, say, of the arm, producing a movement in that limb.

The next great step forward in the development of the sensori-motor system is connected with the beginnings of a brain. We may imagine the evolutionary process to have been that after many preparatory stages, the foremost part of the body of the vertebrate became the centre of alertness. Something more than reflex response was demanded.

Hence the head with the attached organs of sense. As an example of sensori-motor activity at this second or sense level, an experiment performed by Mr. Grant Allen with some wingless ants will serve. In the case of these little animals, whilst their eyes are comparatively undeveloped, smell is their principal sense-endowment. The experiment is described in Mr. Grant Allen's book, "The Evolutionist at Large." By obliterating the track between an ants' nest and the dead body of a worm which they were engaged in removing piecemeal, he almost instantaneously reduced their smell-cosmos to a chaos. They had "lost their scent." Communications and confidence were re-established only when, after active search for the lost track, "head to the ground, exactly as a pointer hunts the missing trail of a bird or hare," the scent was at last recovered. Man's responses at this level are legion. Whilst smell sinks into the background, sight, and hearing, and touch (the whole surface of the body being practically the organ of touch) play a many-sided part. It is at this level that co-ordinations are so deeply ingrained as to have become instinctive. Given the stimulation, the response tends to follow spontaneously. In commenting upon the recent remark of a great physicist that science cannot explain why the particles of a piece of wood hold together so as to form from end to end the same stick, a humorous writer remarked that it is equally inexplicable that the two ends of a man should be so connected that if you tread upon one end of him he calls out at the other. Clearing the mystery and coming to the bare fact, we say that it is instinctive. It is what any child will do. It is born with him, *i.e.*, it is an inbred and not a learned reaction.

But the most characteristic portion of man's sensori-motor system is the brain mass, rising above the lower brain centres of the second level. Comparing the child with the adult, the special importance of this higher brain is seen from its

size at birth as compared with the rest of the body. The ratios are given approximately as follows :—

Height of head of an adult to that of an infant ...	2 : 1
Length of body of an adult to that of an infant ...	3 : 1
Length of arm of an adult to that of an infant ...	4 : 1
Length of leg of an adult to that of an infant	5 : 1

"The weight of the brain of boys at birth is 12·29 per cent. of that of the body, while at twenty-five years it is only 2·16 per cent. of the weight of the body." [1]

It is hardly possible to exaggerate the importance of the co-ordinations of impression and response which take place at this highest or "third level." This higher brain betokens the child's capacity for mental development ; and it is this which to so large an extent presents him to us for the making. Most of an animal's behaviour, as has been said, is born with it. Its range of response, even in the case of the most intelligent animals, seldom rises much beyond the two lowest levels. But a vast amount of a human being's behaviour is acquired. This is made possible, in a psycho-physical sense, through the presence of the higher brain masses.

This higher brain is the vantage-ground of the educator ; for it is the seat of the child's capacity for learning by experience. Its presence accounts for the seeming paradox that though the child is endowed with infinitely more intelligence than any other animal, he yet needs for his proper up-bringing infinitely more looking after.

Seeing that the higher brain is the seat of the capacity to learn by experience, and *par excellence* of human educability through its presence in man in such massive proportions, we

[1] Kirkpatrick, "Fundamentals of Child Study," pp. 1, 19. See also "The Growth of the Brain : A Study of the Nervous System in Relation to Education," by Professor Donaldson.

naturally look to the two lower levels for the mechanism of instinct. Not that instinct excludes consciousness. Instinct is not pure automatism. As Principal Lloyd Morgan convincingly argues, the fact that the future actions of a chick in pecking at grains of food are affected by earlier actions shows that the earlier and purely instinctive actions entered in some way into consciousness. "That which is outside experience can afford no data for the conscious guidance of future behaviour."[1] Yet the earliest actions cannot be guided by consciousness: for such guidance would imply still earlier experience in the light of which they were in part performed. Thus it is the first performance of a reaction, and the first only, which is purely instinctive. The first reaction is purely automatic, because in no way guided by consciousness. All later reactions fall short in their automatic character in proportion as they are affected in intensity or direction or ease of execution by previous experiences. Yet, as Mr. McDougall forcefully says in his latest work, "Social Psychology": "Take away these instinctive dispositions with their powerful impulses, and the organism would become incapable of activity of any kind; it would lie inert and motionless like a wonderful clockwork whose mainspring had been removed or a steam-engine whose fires had been drawn. These impulses are the mental forces that maintain and shape all the life of individuals and societies, and in them we are confronted with the central mystery of life and mind and will."

Since the actual performances are always before us in the children we observe—indeed more or less present with us throughout our own behaviour—little more is needed than to give a list of the most unmistakable of our instinctive tendencies. They are the things which the child is born to do, with Nature's full endorsement of the imperative that

[1] "Habit and Instinct," p. 131.

lies behind the doing. Without instruction the child can suck, and bite, and chew; if any suitable object is put between the lips or gums or teeth, his spontaneous tendency is to set to work upon it: he even seeks occasions of such stimulus and its accompanying exercise. He can grasp; and throughout childhood his fingers often itch for contact with objects, materials, tools. This is part of the way he is alive, and it is no mild form of repression when he finds, as he sometimes does, that he is alive one way and that those about him want him to be alive in some wholly different way. He can point—instinctively points to things to which he wishes to call attention. He can cry; smile; ask, by gesture or by sounds expressive of desire.[1] He creeps; clings; and probably climbs; walks; instinctively. As to the last of these, in a sense, of course, the child *learns* to walk; but the basis and actual beginning of the performance is instinctive. So soon as the muscles are developed sufficiently —and every healthy child spontaneously sees to their development by kicking and other half-random but invaluable forms of cradle-exercise—the very contact of the sole of the foot with a flat surface impels to the endeavour to stand erect, and the muscles which swing the limbs begin to be on the strain towards the activity of walking. To try the least bit prematurely to *teach* a child to walk is one of the surest ways to make him bandy-legged. Then, in the presence of people, without instruction he can reject overtures, and resist interference. In later childhood, he hunts; fights; is acquisitive—gets things and keeps them; by instinct. Instinctively, the child emulates; imitates. He plays;—partly because the whole organism tends towards activity, partly because it is an instinct with him to gain

[1] Professor James says that a sound expressive of desire was in the case of his three children the first manifestation of speech, occurring many weeks before other significant sounds ("Principles of Psychology," vol. ii. p. 404).

control over objects.[1] These are all tendencies to behave, they are the raw elements out of which, by the aid of experience, life's larger behaviours are to be fashioned. They are unlearned reactions—at their first performance practically automatic—yet they first give the child to himself. These actions once performed, by a kind of *back-stroke*, to use Lloyd Morgan's useful phrase, the child becomes aware of what he has done and of himself as having done it. They are first steps towards control of limb, and much beside.

These are all instincts; and capable of being distinguished, as Preyer and others distinguish them, from the purely reflex responses—sneezing, coughing, sighing, blinking, starting, and the like. They are accompanied by consciousness,[2] yet there is no need for premeditation. All that is needed is sense-contact or impression, and the necessary strength of muscle: when these are there, the reaction takes place.

The foundations of practicality are thus laid in the very organism. And it is only when these essentials are provided for, that the self is free to acquire new experience and to deal, as it has to do, with an ever-widening and more complex environment. It is in this way, indeed, that man (if not some earlier progenitor on man's behalf) took the first step towards becoming a self; and on the presence of these more rudimentary endowments has depended man's capacity for advance.

[1] Six different kinds of movement-plays arising from this latter impulse have been distinguished: (1) Mere hustling things about. (2) Destructive or analytic play. (3) Constructive or synthetic play. (4) Plays of endurance. (5) Throwing games. (6) Catching games.

[2] At two stages. There may be conscious elements due to the sense-stimulation which evokes the response; and there are the data to consciousness due to the response itself. Cf. Lloyd Morgan, "Habit and Instinct," p. 208, as to the latter.

Quite clearly we in no way assist in the education of a child by damming up his instinctive tendencies. He must behave. Supposing we say, as most would agree that we are entitled to do, that the child's instinctive tendencies are a selection, from a vast range of possible modes of behaviour, of those which in the experience of the race have been found most serviceable: that, in the child's instincts, the effects of racial experience are "transmitted in some way, at present unexplained, through heredity." [1] What respect do we not owe, however superior our enlightenment, to these inwrought lessons of the past! Most of these instincts are serviceable. Some need to be directed, and in the process are almost transformed; but they still act as an impulsive energy behind acquired courses of behaviour—or more truly are integral elements in such courses of behaviour. Some are positive potencies in the direction of morally right behaviour. Probably none need to be wholly inhibited. As has been well said: "In every movement of the mind towards its object there is an instinctive, as well as a conscious or ideal, source of energy." To be guided in his behaviour with full reference and with a certain amount of deference to his instinctive tendencies is the child's biological birthright. And it is his one sure way of attaining to complete and efficient personality.

Behind all these instinctive tendencies, which we have grouped together as ending for the most part in serviceable behaviour rather than in knowledge or marked emotional experiences, is the master impulse of life itself. By its very nature an organism tends to activity. And, further, the characteristic structure of an organism implies a tendency to behave in ways that are in harmony with that structure. We must, therefore, start with the view of the child's instinctive behaviour as the unfolding of his native energies as a living being; whether manifested in a general tendency

[1] "Habit and Instinct," p. 132.

to be active, or in such specific tendencies as are more commonly spoken of as instincts. Moreover, the serviceableness of movement to the child, over and above the necessity of the sheer physical exercise to physical development, is seen in the contacts with objects and the multiplication of points of view which are directly due to it. The still child is in danger either of learning too little or of learning too abstractly. As a means of self-expression, also, movement is of absolute importance to the child. The too still child is, from this point of view, in danger of becoming either habitually inert and unmoved or of acquiring the habit of allowing even right forms of feeling to evaporate into sentiment. For these reasons, movement, both on the grand or massive scale and in its more specific tendencies, must be looked for and reasonably encouraged, if we are hoping as parents or as teachers to evoke and strengthen the spontaneous inner life which is the core, and whence is continuously supplied the fibre, of personality. And the younger the child is, the more must we plan for and anticipate his spontaneous movements.

How much this truth has impressed itself upon us is evidenced by the change in our methods of education in the infant classes. Even there the development has probably not reached its consummation. In spite of the juvenile experts—and the fact that there are such shows what fine intellectual material is often passing through our hands—who can before they are seven years of age read a newspaper leader which they have not seen before: in spite of the splendid ingenuity and enthusiasm of inventors of methods of teaching reading to very young children and of the subtle mechanical aids devised for the purpose: in spite even of the fact that teachers in the upper school may not want the labour of teaching the beginnings of the art of reading: the writer ventures the surmise—as he frankly expresses the hope—that in the course of another genera-

tion the three R's as formal acquisitions will not be attempted before a child is, at least, six years of age.

ILLUSTRATIONS AND SUGGESTIONS.

1. It may be noted that America has not blindly chosen the Kindergarten as the basis of its infant school procedure. *E.g.*, all the conditions of a test experiment being given, the superintendent of the public schools at St. Louis instituted a comparison between children who went for a year to the Kindergarten in which no formal work in the three R's is done, joining the elementary school at seven, and children who went to the elementary school at six without the Kindergarten experience. The result may be given in his own words :—

"The present investigation, as far as it goes, bears out the idea that Kindergarten education equips the child well for more rapid progress in the grades. There are a number of schools in our city to which no Kindergarten is attached, and for this reason a comparison is possible. In the schools without Kindergartens children are admitted at the age of six into the primary grades, in the other schools at seven. In the first-mentioned schools the children begin school work one year earlier than in the latter, and they might therefore be supposed to keep one year in advance of the others that begin the study of reading and writing one year later.

"The following table shows the average ages of schools having Kindergartens and of those without them, computed separately. It will be seen that by the time the children reach the fifth grade, there is no longer any material difference in the ages of the children of the two classes of schools (twelve years eight months and twelve years nine months respectively), while in the higher grades the average age of the children that presumably had a Kindergarten education is

somewhat lower than that of the classes in schools that offer no Kindergarten training."

TABLE SHOWING AVERAGE AGE BY GRADES.

	Kinder-garten.		I.		II.		III.		IV.		V.		VI.		VII.		VIII.	
	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.	Yrs.	Mths.
White Schools having Kindergartens . .	6	7	8	0	9	3	10	7	11	9	12	9	13	7	14	6	15	1
White Schools without Kindergartens . .	—			6	9	0	10	2	11	5	12	8	14	0	15	1	15	5
Coloured Schools having Kindergartens . .	6	7	8	10	10	4	11	6	13	1	14	3	14	9	14	9	15	7
Coloured Schools without Kindergartens .	—		8	5	10	8	11	11	12	8	14	3	14	9	—		—	
All Schools	6	7	8	0	9	1	10	7	11	10	12	10	13	8	14	1	15	0

What these figures show is that there is a decided gain in the early stages of education in giving the mind time to grow.

2. That allowance for the tendency to do what seems just right to them may be carried to an extreme in the children's school experience, American education has also proved.

3. The author of the parable quoted at the end of these suggestions says : "In a sense, a child or a man is the sum total of his movements or tendencies to move ; and nature and instinct chiefly determine the basal, and education the accessory parts of our activities."

4. The following observations might be made of children's behaviour : (*a*) Instinctive movements of head or body in the direction of an object exciting attention ; (*b*) The fact that young children especially, but all children more or less, are specially interested in moving things—live things, models ; also in making things move. Hence "occupations," and the general method of "learning by doing" ; (*c*) Their

pleasure in sheer sense and muscle activities; (*a*) Any of the specific instincts mentioned above, *e.g.*, the "playing with" things in class as showing the craving for actual contacts; (*e*) The children's pleasure in massive movements, such as marching (especially to music introducing an added consciousness of rhythm); (*f*) The difficulty with which non-instinctive co-ordinations are acquired, *e.g.*, catching a ball by children of from five to six, and so on; (*g*) The imitative impulse.

One or two methods are found specially serviceable. (i.) Visiting schools where the children, as in Demonstration Schools attached to Training Colleges and in American schools universally, are so accustomed to the presence of visitors as to ignore them; in such schools general observation of the life of a class will always be fruitful; (ii.) Visiting the same class regularly, say from week to week, and, whether the visiting is done in groups or individually, each selecting one scholar for more immediate observation. (At discussions and comparisons of notes after such visits by groups of students, highly interesting points are brought out as to differences of temperament, the effects of differences of earlier experience or of home experience—only child or one of many and the like—variations in the strength of instinctive tendency, and so on); (iii.) At home or elsewhere, but without the child's knowledge, to note down all that a child does in ten or fifteen minutes; (iv.) Not so much to experiment, because that at first gives us a pose which puts the child on his guard, but in friendly and natural ways to seek intercourse with children and recall afterwards what passed. (One young teacher, *e.g.*, heard some young children at play on the other side of a hedge and much wanted to join them; but she waited patiently till she had learned their play language and had entered into the spirit of the game and into *their* spirit in the game, and then joined them—a welcomed comrade.)

5. For further reference: Lloyd Morgan's "Animal Behaviour," and "Habit and Instinct"; Thorndike's "Notes on Child Study"; King's "Psychology of Child Development."

6. Compare the fact (noticed on page 42) of the permanence of the effect of instinctive factors in our experience with the truth stated on page 73 that intelligence may accelerate the lapsing of instinctive tendencies into disuse. The extinction of an instinct is, as stated in the last-named context, a more or less prolonged evolutionary process.

7. A highly apposite illustration of the main points in the preceding chapter is here reproduced with the author's and publishers' permission. It is from the pen of President G. Stanley Hall, and is contained in a chapter contributed to a volume published by Messrs. Longmans & Co., on "Principles of Religious Education." It is a parable of the Tadpole and its Tail.

THE TADPOLE AND ITS TAIL

I sometimes used to ask my students how many of them believed that the tadpole's tail ever fell off when it became a frog; and most of them thought it did. But every naturalist knows that there never was a tadpole's tail in the world that fell off: and that is the point of all we have to say. Never a tadpole lost his tail. It was absorbed: and the very matter and blood that went to make tail was simply made over again into legs. And if the tadpole's tail is cut off, then the legs never grow, and the frog is condemned to pass his life in a lower aquatic stage. He never becomes an amphibian, and never gets on the land. That is the parable of the tadpole's tail. . . . You may say, "To develop the frog nature of this tadpole, I will clip off this tail, so that the energy will go into the legs and he will get mature a little earlier, and the legs will be strong." This is what we do in the training. We forget that Froebel was right when he said, "Every child must live out completely every complete stage of childhood, or he can never develop into complete maturity."—G. Stanley Hall.

CHAPTER IV

MAN'S INSTINCTIVE TENDENCIES: (*b*) INSTINCTIVE TENDENCIES WITH AN INTELLECTUAL REFERENCE

It is all-important from the standpoint alike of child-study and of educational procedure to ascertain the range of the child's native spontaneity. The native spontaneities of man may well be wider in their range than could by any theory be accounted for on the lines merely of nerve-stimulation and muscular response. There may be native tendencies not only of the body but of the mind, of the "heart," and of the spirit. There may be affinities which we do not acquire, which, whilst using the body for their expression, yet have distinctive qualities which make the purely sensori-motor aspect but a small part of the whole phenomenon. Whatever the nature and the number of these spontaneous tendencies, account must needs be taken of them in any wisely ordered education.

The second group of instinctive tendencies which we are now to consider includes spontaneous and unlearned ways of responding to environment which tend directly to give knowledge of the environment. And, if the name "instinct" is given to reactions which do not depend for their performance on any previous experience on the part of the individual, may we not rightly apply it to reactions which, whilst associated as the earlier group was clearly seen to be with our nervo-muscular system, yet depend for their spontaneous and original character upon the very

nature and constitution of the mind? To admit this is but to illustrate further the appropriateness of the term psycho-physical as applied to the human organism, and to see how inevitably man's compound nature is bound up in every phase of his experience.

We cannot, of course, go back to the very starting-point of individual development and experience without encountering difficulties of psychological analysis. For example, it does not seem possible to say with certainty whether the impulse or stimulation leading to a purely instinctive reaction of the kind we have been discussing is really only a matter of nerve-excitation or has some kind of conscious accompaniment. Of those who have been quoted in the preceding chapter Mr. McDougall in his "Introduction to Social Psychology" holds that there is a clear psychical or conscious accompaniment. Mr. McDougall's view is that "there is every reason to believe that even the most purely instinctive action is the outcome of a distinctly mental process, one which is incapable of being described in purely mechanical terms, because it is a psycho-physical process, involving psychical as well as physical changes, and one which, like every other mental process, has, and can only be fully described in terms of, the three aspects of all mental process—the cognitive, the affective, and the conative aspects; that is to say, every instance of instinctive behaviour involves a knowing of some thing or object, a feeling in regard to it, and a striving towards or away from that object.[1]

On the other hand, Principal Lloyd Morgan thinks it safer to leave this an open question and to look at the procedure from the physiological point of view, holding that we can only conjecture, not only as to the nature of the conscious impulse which is commonly assumed to accompany the performance of an instinctive action, but even as to the presence of such conscious impulse.

[1] "Social Psychology," pp. 26–29.

Leaving this point, however, two things may be said without much hesitation. The first is certainly beyond question—namely, that there are intellectual results from instinctive reactions as there are from those more complex reactions which have in them a large instinctive element. They afford "data for the conscious guidance of future behaviour."[1] So a dog, following the bias imposed upon his experience by his specific brain structure and organisation, begins by smelling smells. But he not only smells smells, "he remembers smells, he thinks smells, he even dreams smells, as you may see by his sniffing and growling in his sleep." And in the next place, there is not much doubt that there are forms of instinctive tendency which have a direct reference to intellectual results. These form the subject of the present chapter.

First of all, corresponding to the general tendency to physical activity already mentioned, is a general tendency to mental activity. Mind spontaneously tends to be active. As if to emphasise this tendency in the child, we have the massive higher brain. Its very presence, especially in such striking proportions, counts for much. The child is built brainily; and the higher brain soon finds uses for itself both in connection with the lower portions of the sensori-motor system, and in connection with the spontaneous acquirement and organisation of knowledge.

With respect to the connection between the higher brain and the lower portions of the sensori-motor systems there are two things to be noted: (1) The higher brain does not live out its life in a state of exalted independence. It is from this point of view like the upper classes of society, which would soon cease to be upper if it were not for the industry of the lower. Omitting from consideration the lowest level of wholly reflex responses, it is fairly certain, that, apart from its connection with the domain of the

[1] "Habit and Instinct," p. 131.

five senses, we might as well carry our upper brain about in a carpet bag as have it where it is. The sense-organs with their spontaneous reactions to stimulus are integral parts of the brain-system. Alike, therefore, as a matter of instinctive necessity, and because of nature's anticipations for him as an intellectual being, the child needs to have plentiful opportunities for sense-activity. He is built for his environment, and he attends instinctively to real things. In this way he gains his first knowledge of the world in which he is to live. Through sheer sense-activity and responsive muscle-activity he enters upon his life as an intelligent and an intellectual being. (2) The functioning of the higher brain itself reacts upon and widens the range of the child's activity.

It is, moreover, in virtue of his higher brain endowment that the child, still impelled by instinct, begins to forge ahead just where the animal stops short. We may take as an example the child's instinctive curiosity. A dog evinces curiosity, certainly, but he seems to sum up all when he has placed the object in question either in his satisfactory or his unsatisfactory smell column. Most of his final inductions seem to come within the category of smell.[1] A monkey has a good deal of destructive inquisitiveness; and the boy, say some, inherits it. But the tendencies in the two cases are quite incommensurate. Knowing a little of the bare "this" and "that" of things, in answer to his instinctive curiosity as to what things are,—and even so, knowing more of the "what" of things than dog or monkey can, the boy, quite as instinctively, asks "Why?" and "How?" A fairly typical child's question

[1] There is a considerable divergence of opinion as to how much power of learning by experience animals have. There are cases which might be cited which seem to show that their responses rise clearly above the instinctive or sensori-reflex level. But the *average* response is certainly not above this level.

was that of a little boy of four who said one day, "Mother, is that a cow?" "Yes," she said, "it is a cow." "Mother, *why* is it a cow?" he asked. Whether or not the belief that everything has a cause is, as some have urged, one of the universal conditions or "laws" of thought, the "Why?" and "How?" of the child is certainly a spontaneous instinctive questioning. "Man wants to know. When he no longer wants to know he ceases to be man," said Nansen.

It is only possible to suggest in a general way the nature and directions of the instinctive play of the mind in building up its experience. All the main movements of the mind in the acquirement of knowledge seem to have instinctive beginnings. Instinctively, from the mere fact that he possesses a mind, aided, of course, by the delicacy and physical discriminativeness of the organs of sense, the child discriminates experience from experience; he interprets experience by experience—the new by the old: he associates experience with experience. So much of our intellectual capacity is given, not acquired, that our acquisitions never reach a level at which they are independent of the mind's purely native tendencies.

For example, when we distinguish spontaneous from voluntary *attention*, we find that, whilst some instances of spontaneous attention are due to habit and association, others are due to a purely primitive tendency. The latter type clearly has, as Ribot says, "its roots in the very basis of our being."[1] But a careful examination of any single instance of voluntary attention would show that the will, however strenuously exerted, never elects to run counter to all original tendency. Depending though will does upon an act of choice (Aristotle's *προαίρεσις*), no concrete example can be found in which our voluntary attention wholly transcends our native tendencies. All voluntary effort has reference to what, in virtue of some part of our

[1] "Psychology of Attention," Eng. trans., p 13.

nature, we spontaneously tend to be. The bearing of this upon the school theory of interest is evident. We do not "create" interests; they are outgrowths of the child's instinctive tendencies. The child never fruitfully attends to anything which is altogether out of relation to these tendencies. Any attention that is worth having is so because it is reinforced by spontaneously operating laws of his mental being. Even the claims of the ideal, which it is part of the aim of school education to present, are all grounded in the actual child-nature before us. The highest genius illustrates the same broad principle. Ribot instances Fourier, the mathematician, who was "turbulent and incapable of application" till he was introduced in his thirteenth year to the study of mathematics; thenceforward he became a different being: Malebranche, the philosopher, who by chance and half-reluctantly took up a book on philosophy and who was so arrested by it that he had to keep laying the book aside in order to breathe freely: and so of Newton and many others. "Some perhaps will say: Such traits are the marks of a dawning vocation. But what indeed is a vocation but attention discovering its way, its true bearings, for the rest of life? No finer instances of spontaneous attention could be given."[1] Attention is just the selective power of the mind whereby anything whatsoever becomes definite, and is distinguished from the rest of the world of objects. If we were not by the very nature of the mind, and of the nervous system, able to single out "this" that I see or "that" that I hear from the whole range of possible experiences at any moment, it would be the same thing as having no experience. We could no more have an experience without attention than a photographic picture without focussing. Evidently this is not acquired. It has to be there from the outset if experience is to begin at all. It is absolutely

[1] *Op. cit.*, pp. 14, 15.

original. Starting from the child's keen attention to objects, we can trace throughout a mental spontaneity present in attention in all its forms apart from which we could scarcely be said to be possessors of minds at all.

The same is true of the other absolutely fundamental capacity of mind, its power of *retention:* fundamental, because, if without attention all consciousness would be a blur and no beginning whatever be made towards perception or the most rudimentary form of knowledge, so without power of retention the mind would be a blank, carrying nothing forward from one moment's consciousness to the next. No attention, no mind; no retention, no mind. A child has not, fortunately for the teacher, to be taught to remember. It belongs to the mind's own nature. The teacher's help of various kinds, and his by no means trivial acquirement of skill in the presentation and arrangement of what he teaches, affect the directions which memory takes. But the main work of remembering is part of our spontaneous mental activity.

The processes of *discrimination* and *assimilation*, again, are not learned or acquired. They are rather primitive aspects of the activity of attention and memory. No beginning of an intellectual experience could be made without them.

Nor does the mind need to be taught to *apperceive.* It is part of its very nature to bring its past experiences and acquisitions to bear in dealing with fresh experience or in gaining fresh ground. In the same way we might speak of *association.*

What we are finding, then, is that all the main strands of our intellectual experience depend upon the mind's absolutely original tendencies. Attention, retentiveness, discrimination, assimilation, apperception, association, are one and all guaranteed in advance. And these are the vital processes of our mental being. The highest reaches of man's mind are large and rich assimilations and constructive

associations,—as in the discovery of laws or principles; the composition of works of literature or art; the devising of great practical schemes of reform, of government, of commerce; inventions;—based upon the fine and accurate discriminations of exact thinking and detailed selective planning. The untaught tendencies to note, to interpret, to compare, to combine, lie behind it all.

In noting this wide range of unlearned or instinctive tendency underlying all intellectual processes, the accompanying and to a large extent determining bodily conditions are, of course, not to be lost sight of. We are dealing throughout with *psycho-physical* phenomena. It is, accordingly, as necessary as it is customary to speak of the neural basis of memory; the physical adjustments implied in attention; the nerve-paths in the brain-substance which are the physical bases of association and thus both of apperception and of mental habit. (*See Note on p.* 80.)

To sum up in a sentence: the general lines along which experience travels and the mind unfolds are given, not acquired. Obviously, the educator's labour is eased if he learns to follow these lines. This is why, as teachers, we need to know something of psychology, which deals with the laws which govern the mind's behaviour.

One somewhat important theoretical question remains. It has to do with the relation between our intellectual life and instinctive tendency; and it affects to some extent our view as to the foundations of mind and the nature of the child's congenital endowment. It concerns, therefore, the part assignable to instinct in the unfolding and up-building of personality.

The question connects itself with the nature of instinct as discussed in this and the preceding chapter. It is the question as to how far instinctive reactions, especially those dealt with in the preceding chapter, may have arisen in-

dependently of consciousness, *i.e.*, on a purely physical plane. Certainly, as Professor James says, instincts must have been either (1) each specially created in complete form, or (2) gradually evolved. The former alternative he dismisses as "nowadays obsolete." But with regard to the latter alternative, it has been matter for debate whether the history of the growth of instincts is one of mind and physical organism co-operating, *i.e.*, is psycho-physical, or is merely physical. It might be said, perhaps, that, granting the facts of instinct, the question of its origin matters but little ; that the build of the self may be considered quite apart from the process of building. But, in the first place, there is no such thing as a built self. The self is still, and always, in the making. The important thing, therefore, is the process. And a second reason for going back to origins, at least so far back as science itself invites us, arises if our interpretation of mental processes and mental development is in any marked degree affected by such theories of origin.

One of the most recent utterances in this connection is that of Sir E. Ray Lankester in his presidential address at the British Association Meetings in 1906. His conclusion in the paper from which he there quoted[1] is that "there is no community between the mechanisms of instinct and the mechanisms of intelligence, and that the latter are later in the history of the development of the brain than the former, and can only develop in proportion as the former become feeble and defective. . . . To a large extent, the two series of brain mechanisms, the 'instinctive' and the 'individually acquired,' are in opposition to one another." Obviously, if this is so and thought and instinct are essentially at odds, not only does man become a greater puzzle to himself than

[1] A paper written by himself and published in the Jubilee volume of the Biological Society of Paris (1899). It was reprinted in *Nature* for April 26, 1900. It is from *Nature* that the quotations are here made.

ever, but the practical problem as to what he shall do with himself, and, if he be an educator, what he shall endeavour to do for his pupils, is more puzzling still. We are almost forced to ask: Is education an uprooter of instincts? Is the sequel to "A body hast Thou prepared me," that we have to preside over its rebuilding? Or are we right in having suggested that instincts, even those which are for the most part merely behaving tendencies, are really a base upon which, with a certain reserve, the educator may build?

Professor Lankester's argument, whereby he maintains that it is the undoing or loss of instinct which "permits and necessitates the education of the receptive brain," is based in the main upon an examination of the brain cavities of some of the extinct mammalia of the Tertiary Period. The Titanotherium, the rhinoceros of that period, and "a true rhinoceros," had not more than a fifth of the brain substance possessed by the living rhinoceros, though the animal itself was as large as, if not larger than, living specimens. Similar increase in the size of the brain is observable in comparing extinct with living reptiles, and in the human brain as compared with that of the more ancient pithecoid apes. Now, assuming that the Titanotherium was an "efficient and adequate piece of living mechanism," *i.e.*, that its nervous system served it as well as does that or the living rhinoceros, it would seem, on the face of it, to have been at no loss through the smallness of its brain. If it was not, Professor Lankester argues, we may regard its efficiency and adequacy as having arisen to a large extent independently of consciousness of which the brain is the organ. Yet—to deal at once with this specific argument—since there is a brain cavity, and since a brain, however small, may be taken to imply consciousness, and since we have no means of knowing how much consciousness is necessary (supposing consciousness to be involved), the mere

smallness of the brain cavity in no way proves that no consciousness intervened. And, in the second place, as to the efficiency and adequacy of the response to their environment, the fact of the possessors of these smaller brains having become extinct must be taken into account. Indeed, at the instance of Dr. Andrews, of the British Museum, Professor Lankester in a note to his Romanes Lecture on "Nature and Man" frankly admits that the elephant of the Tertiary Period had a *large* brain cavity; and that this fact accounts for the elephant having survived into our own time. The small-brained monsters clearly seem to have been incapable of holding their own as the larger-brained monsters did. They existed, as Professor Lankester says, "from generation to generation"; and so far must have been capable of organic response to their environment. But they have become extinct, whereas larger-brained monsters have proved themselves capable of surviving. The Titanotherium argument would seem rather to point in the direction of brain-activity (and therefore consciousness) having played an essential part in the acquisition of life-sustaining responses.[1]

[1] In further support of the play of consciousness in the up-building of instinct, there is the fact that many of our serviceable *acquired* reactions pass from the stage of conscious effort into that of secondary automatism or habit. This analogy from habit may clearly be adduced in favour of the play of consciousness in the up-building of instinct. Again, if for any reason the action is not normal, consciousness may be associated, or re-associated, even with a process that is ordinarily reflex, as in swallowing a pill or in intentional salivation. Further, if reflex and instinctive responses grow up wholly on the lower plane and yet *operate satisfactorily,* why should conscious or voluntary movement have ever arisen? If spontaneity and natural selection suffice, what need for consciousness? The chief weight probably attaches to the first and the fourth of these arguments, as the second and third are not incompatible with the non-conscious rise of instinc-

It may well be, however, that a certain preparation of the mechanism employed in instinctive reactions has taken place on a physical plane and independently of consciousness; even though it also appears clear that consciousness has played its part. With regard to the *possibility* of the preparation or structure on a purely physico-chemical plane, many interesting experiments have been made in recent years tending clearly to show that products of the laboratory, *i.e.*, of physico-chemical processes, may simulate certain rudimentary forms of organic life.

It is fortunate for the educator if, as the argument seems to show, there is no need to emphasise the incongruity of instinct and intelligence. For it is evident that the educative process would suffer a severe handicap if Nature and intelligence (as the teacher seeks to develop it) were really at variance. Whatever opposition there may be between instinct and intelligence, it is very far from being a conflict of extinction. Some instincts die out of themselves, so far as anything that has once held its own in the history of the organism can die out. They die out when the environment does not call for them; just as it no longer calls for the activity of the rudimentary organs, over one hundred in number, which are said to be present in the child's body, and which are not only of no use, but some of which are even in the way. But those instincts which do not die out it is no part of the work of intelligence to kill. Occasionally it may accelerate their lapsing into disuse, but more generally it will utilise, co-ordinate, modify, and direct. Thought, truly, makes new adaptations; but it does so either by taking the old as its point of departure or

tive reactions. Although, even with regard to these, a special difficulty arises in connection with the idea of consciousness assuming control of pure bodily automatism, namely, the difficulty of realising how interaction can exist at all between wholly heterogeneous factors.

by working new territory. It comes not to destroy, but to fulfil.[1]

We may take it, then, that the child's instincts are a true endowment; that they are part of his equipment. They are germane to the life of the child, and to the life of man, —an inherited power to grapple with the world and to use its resources. None the less, they may have to be schooled. And in seeking to utilise and to direct the child's instincts, general principles must guide us. Briefly to state some of these will be the most direct way of showing the educational bearing of this and the preceding chapter.

(1) One general principle to be applied in the schooling of instincts is to remember that each age and stage has a certain completeness of its own, accompanying its incompleteness. To be immature is not necessarily to be imperfect. Whether as parents or teachers the "natural child," the "real boy" has worth for us quite independently of the consideration that he is an adult in the making. There is continuity, of course, between the life of the child and the life of the adult. It is as true to the vision of science as it is to the vision of the poet that "the child is father of the man." When we speak of the transitoriness of instincts and of epochs in child-life when this or that instinct becomes prominent, we do not mean that life is carried through by a series of spurts. Man is built on the long-distance race principle. And this fact also emphasises the value of each stage. If at any point he does not get into his stride, ground is lost on the whole race. Whether, then, we are considering the worth of the child as he is, or the worth of being a "natural child" or a "real boy" to the man that is to be, value attaches to the ample expression by the child of his own natural life. Why, for example,

[1] For further treatment of this subject, see President Stanley Hall's "Youth: Its Education, Regimen, and Hygiene," p. 11. See also the same writer's "Adolescence," vol. i. p. 156.

should I sometimes in play-intervals allow children in the nursery or in the Transition Class and in the lower Primary Classes (say up to nine years of age) to use the balls of Froebel's First Gift for throwing at a target? I answer: Why is it we often see full-blooded big boys throwing stones at birds or sticks at dogs? It is most probably because they were preternaturally checked from some such exercise when they were little boys. If we provide targets, with interesting features according to taste, we are making timely use of a ready-made impulse in the direction of hand and eye co-ordination. We are also doing something to justify ourselves in trying to train "good little boys who do not throw at poor little birds." There is a time for the target and a time for the word-building sheet; a time for mud (or clay, a cleaner and slightly less-loved form of mud), and a time for the penholder; a time for real free following of one's own devices, and a time for bending to set tasks. And these times are not always fixable by means of Time Tables and school curricula. Nature fixes them. "I've often wondered," says the American "philosopher," Mr. Dooley, "what a little boy thinks about us. We fire him off to school just about the time of day when any one ought to be out of doors. He has to sit there most of the pleasant part of the day, and every time he tries to do anything that seems right *to him*, the strange lady or gentleman that acts as his keeper swoops down on him. . . . Towards evening if he has been good and repressed all his natural instincts he is allowed to go home and chop some wood. . . . And so it goes. . . . If he does not do any of these things, or if he does not do them the way ye think is the right way, some one hits him or wants to."[1] Whereas, really the child's

[1] Mr. Dooley is instructive because he has the courage to say opposite things at different times, both of which are true. Both in this connection and as a comment on a note at the end of the preceding chapter, other words of his should be quoted. "We

instincts lead him fairly straight in respect of fundamentals. Our first duty in learning to educate him, is to know them —that is, so far to know him; and our second, to make discriminating but not half-hearted use of them as native sources of energy in developing his intelligence.

We want the child to use nature's endowment. The only trouble sometimes is to know how to do this. At school, especially, he often shows his mental and physical propensities in a way which makes it not so much a difficult thing to educate him as to educate him and a number of his peers simultaneously. The real success which so many teachers are achieving is but one further testimony to what human endeavour can accomplish in spite of difficulties.

(2) Another general fact to be borne in mind is that there are grades and types of innate disposition. A child may have a relatively poor or a relatively rich instinctive endowment. Once more to illustrate from animal life. Principal Lloyd Morgan tells of walking with a friend and his five young hounds. They came to a gate, the lower bars of which were close together. The two men got over and watched the pups. At first all tried the lower bars; but presently one, then a second, and a third tried higher up, and got through. The fourth persistently struggled at the lower bars. The fifth now and then made an effort, but for the most part lay and whined. When the men climbed and reclimbed the gate, the three successful dogs came through each time; the other two

send," he says, "the childer to school as if it was a summer garden where they go to be amused. . . . They're conducted up thro' a channel of free and beautiful thought till they're ready for college. . . . I don't care what ye larn them so long as 'tis onpleasant to them. 'Tis thrainin' they need." An apology is due in passing for not adopting all our philosophical humorist's spelling.

repeated their respective manœuvres for a full twenty minutes, when the experiment was abandoned. The dogs were differently endowed. And differences similar to these may reproduce themselves in the boy-world. Some have initiative : they are born that way. Some, again, will learn from the leaders : it will save us trouble, as teachers, to let them do so, contenting ourselves largely with guiding the process and with setting suitable tasks. The one that tries, and tries, wants a pat on the back and a lift up ; after that he will probably make his way through. He needs teaching. The rarer type of boy who gives up and whines we shall probably, after trying the pat and the lift up, have to remove to a lower class, or give him other work. He must be taken to a gate that he can get through.

(3) Instincts being fixed up in a psycho-physical organism, and depending largely on sheer bodily organisation, we are reminded that bodily conditions underlie all acquisition. Education implies handwork. Yet here, again, a difficulty arises. Many children come to school physically tired. Either through work at home or through playing a part in the nation's vast business which has not yet risen in its strength and shaken itself free from child-labour, children sometimes come to school fitter for sleep than for work. It is a perplexing problem. If we could only know which was which, we should do well in many elementary schools, some of which would perhaps not be suspected of the second need, to set some of the children to educational handwork whilst others were allowed to lay their heads on their arms and fall asleep.

(4) A fourth consideration affecting our work as educators is that sometimes we have to interpret instinct from the point of view of the spirit of the thing rather than as it actually appears. The race only slowly outgrows its more primitive ways of instinctive behaviour. The tiger and the

ape in us are doomed. But they die by inches. Their doom will come by transformation, not by extinction. "There are wild traits in tame animals." And there need to be. Only those who appreciate this really understand the tame animal.

SUGGESTIONS AND ILLUSTRATIONS.

1. Observe the universal pleasure children find in using their own minds in their own way.

2. For observation in school, home, or elsewhere as occasion serves, the following methods are useful: (i.) To note down during some five or ten minutes all that one child says, for example, when the child is playing by himself or with one or two other children in the nursery; (ii.) To note the number of verbs, or of words used as substitutes for verbs, in the young child's vocabulary, and of nouns; (iii.) To note how nouns are made to serve for verbs and verbs for nouns, and so on, giving a certain insight into the history of the growth of language (*e.g.*, "hammer" as a verb, "talk" as a noun, in ordinary speech); (iv.) To note how as children grow older their speech becomes more complex to suit their thought; how from the elliptical sentence stage they pass to the simple sentence and sentences compounded by the connectives "and," "and so," "and then," and on to complex sentences.

3. This last point comes out clearly in comparing essays written upon wholly unprepared and interesting topics by school-children of different ages, *e.g.*, such subjects as: "How I should like to spend next Saturday," "How I should like to spend my next holiday," "Our ramble to ——," "If I had a sovereign, what I should like to do with it."

4. We may note that children come to their first acquisition of general names by experimenting with them in connection with objects. Our general ideas or "con-

cepts" come to a perfectly clear meaning by stages. At first the name, which is the verbal equivalent of the general idea, serves roughly to mark off the fact that we mean one class of objects, not another. ("Gee-gee" does this for the little child, after a series of, to him, subtle discriminations from "moo-cow.") Then the name comes to convey in its meaning an idea of the salient features belonging to the group of objects so distinguished. And, lastly, we arrive at a few (a few only in the case of most of us) actually clear and distinct and adequate concepts in the ideas and terms that we can "define"; a definition being the verbal expression of a perfected general idea.

5. Other points in connection with the subject of this chapter are discussed in Kirkpatrick's "Fundamentals of Child Study"; King's "Psychology of Child Development"; Thorndike's "Notes on Child Study" and "Principles of Teaching."

6. In addition to the more specific arguments in favour of consciousness or mind being at least to some extent associated with the development of instinct, there exists a widespread tendency at the present time to associate mind with animal life even in its simplest forms; and some go so far as to include plant-life. "In our distribution of minds may we stop short of even the very lowest animal organisms? It seems arbitrary to do so."[1]

[1] Fullerton, "Introduction to Philosophy," p. 143. Cf. also Binet, "The Psychic Life of Micro-Organisms," especially the preface to the American edition (The Open Court Publishing Company). Similar arguments are used by F. W. Headley in "Life and Evolution." On the other hand, Verworn and others argue for a very wide range of physico-chemical activity. See, too, Principal Lloyd Morgan's "Introduction to Comparative Psychology," pp. 332–6. There are three possible answers, he says, to the question, how consciousness came to exist. (1) That it was specially created in man, or in some lower organism from which man has evolved: a view which he admits is logically

tenable, and one with which he has considerable sympathy. (2) That it has been directly evolved from energy; this is inadmissible through lack of evidence in its favour. (3) His own view, the evolutionary alternative to (1)—namely, that "the states of consciousness which are found in the higher animals have evolved from lowly modes of infra-consciousness"; the evolution of consciousness having kept pace with the evolution of higher animal forms from lower.

NOTE to p. 69.—Referring to the two hypotheses as to what happens in the central nervous system when habits are formed, Halleck says: "It is not improbable that both theories may be true; that not only may new and shorter routes of brain travel be developed, but also that existing paths may be employed with greater facility" ("Education of the Central Nervous System,' pp. 224–5).

CHAPTER V

MAN'S INSTINCTIVE TENDENCIES: (*c*) INSTINCTIVE TENDENCIES WHICH HAVE A MARKED ACCOMPANIMENT OF FEELING

WE come now to the third of the groups of instinctive tendencies, those in which there is a strongly marked accompaniment of feeling. As before, we are reminded of the difficulties of psychological analysis when the most elementary form of experience is in question. Some distinguished psychologists have believed that a state of feeling is the simplest and most elementary form of consciousness. Some, on the other hand, place activity first; others, some form of awareness. Ribot's "Psychologie des Sentiments"[1] contains one of the best-known advocacies of the priority of feeling; though even he believes unconscious organic movement to be its necessary forerunner. Westermarck, in his theory of the fundamental emotions of repugnance and attraction, also connects movement and feeling very closely together. Herbart, on the other hand, starts with presentations; then in the relation of presentational elements to each other he discovers feeling (interests); and from feeling-laden ideas he derives volition.

In respect of all such theories we have to remember that genetic explanations of whatever kind are at present but

[1] English translation. Published by Walter Scott & Co. (Contemporary Science Series).

tentative. And even when pushed to their limits they necessarily leave some residuum, some original element or condition apart from which it is inconceivable that any beginning should be made. As Höffding says, in the context from which we have already quoted: "The inner unity, to which all elements refer, and by virtue of which the individuality is a *psychical* individuality, remains for us an eternal riddle."

Feeling is the quality of pleasurableness or painfulness which attaches in some degree to practically all our experience. We could conceive of beings capable of having experiences and not caring; merely taking note of what was presented, but incapable of interfering or responding. But feeling is at the foundation of all conscious response. To say, then, that we are born with definite capacities for feeling is but another way of saying that we are born with one of the first essentials of conscious personality.

In its most general sense, interest is a synonym for this attitude of the self towards its own experience. And we are now to inquire how far we have, by sheer nature, tendencies which may be called "instinctive interests" or "emotional instincts."

One of the characteristic attempts to show how large a part may be assigned to instinctive aversive or appetitive feeling in the upbuilding of personality is that of Westermarck. Westermarck traces the play of instinctive feeling throughout a long process of development, taking over the instincts of indignation and approval from what we might roughly call the stickleback stage; sticklebacks being cited by him as exemplifying a marked hostile reaction when their territory is invaded by other sticklebacks. (As we go lower in the scale of animal life, we find the conative element dwindling away till nothing is left but mere reflex action.) Ascending the scale from the elementary display

of the emotion of indignation by creatures at this (stickle-back) stage, development takes place through a gradual rise in the purposiveness which characterises the hostile or friendly reactions; there is a ceasing merely to strike out blindly, and a learning to direct the aim. From this point onwards, Westermarck traces a chain of emotional phenomena to which he gives the name of "non-moral resentment," a chain in which there is "no missing link," their common quality being that they are mental states marked by resentment of pain. So we come at last to the higher attitudes of the self towards conduct, which are known as moral, the chief feature of which is still the feeling-attitude, whether of indignation or approval. True, there are fresh adjustments. Moral indignation is tempered by deliberation as to the meaning and true cause of the injury, and by a consideration of the effects of retaliation. But even the rule of forgiveness leaves room for righteous indignation. By these degrees, Westermarck leads us at last to the stage at which we are capable of bringing the sanctions of our indignation and approval to bear upon our own conduct. We condemn ourselves when we recognise ourselves to be the cause of pain. We experience moral self-approval if we find ourselves to be the cause of pleasure. The essence of this moral judgment is that the characteristic emotion is aroused with reference to conduct as conduct, rather than with reference to its effects.[1] So Westermarck finds it possible to construct a complete ethical system on the basis of the two primary emotional instincts of attraction and aversion.

Ribot also furnishes us with a kind of ascending scale of states of feeling, arranged in their order of development. (1) He traces the beginnings of experience back to a

[1] "Origin and Development of Moral Ideas," vol. i. All the points here referred to will be found in the first five chapters, which deal with the nature and origin of the moral emotions.

pre-conscious plane: *la vie affective, dont l'élément profona consiste dans les tendances.* (The last word is somewhat vague in its use and meaning, and difficult of translation.) This "*vie affective*" is for Ribot a rudimentary, protoplasmic sensibility preceding the dawn of consciousness. It is manifested in well-marked tendencies of attraction and repulsion displayed in movements. But the gulf between pre-conscious and conscious can hardly be said to be spanned by Ribot's theory. Physical attractions and repulsions may have been there; but they would not in any degree account for consciousness. There can be no feeling until consciousness has begun to translate into its own terms that which was erstwhile on the pre-conscious plane. The foundations may have been there,—what Ribot calls the motor manifestations (*manifestations motrices*). But they were there as blank cheques; forms prepared for the expression of emotion before the emotion itself was present. (2) Then appear the primitive emotions, which we shall in a moment take up in detail. (3) Above these, in the order of development we have complex emotions, depending upon a more advanced mental life; in connection with which Ribot deals with the passions.

Before considering the second of Ribot's groups, one elementary group of feelings should be mentioned. Reflex and instinctive activities have characteristic feeling accompaniments. There is an intimate association of bodily feeling with our organic life. We *feel* hungry, *feel* tired, *feel* rested, and so on. Healthy circulation, normal respiration, good digestion all yield their contributions to the massive consciousness expressed in the words: "I feel well." A sense of gratification, moreover, attaches to the play of instinct. Bodily activity, when spontaneous, is pleasurable. Equally so is mental activity. And the more specific forms of activity of each kind have their accompanying pleasures.

But the question directly before us is as to the emotional instincts or primitive emotions. An exhaustive enumeration of these it is not easy to offer. The lists differ considerably. But we cannot do better than begin with Ribot's list. He singles out as undoubtedly instinctive: fear, anger, affection, positive and negative self-feeling (*Selbstgefühl*), and the sexual emotion.

(1) The instinct of *fear* manifests itself in very early childhood and takes various forms. The child shows fear of noises, of some strange people, and of some strange animals. Black things, the dark, solitude, commonly give rise to fear, and, as an apparent relic of life in far back ages, fur, big eyes, and a display of teeth often have this effect. We must admit, says Ribot, that the bases of fear "exist in the organism, form part of the constitution of animals and men, and help them to live by a defensive adaptation which in most cases proves useful."[1]

(2) A deep-rooted instinct of aversion which is sufficiently akin to fear to be referred to in connection with it, is *the dislike of the unaccustomed or the strange.* This organic dislike, common to us and to animals, determines our attitude in important ways. It acts as a foil to the gregarious instincts; and so in man adds intensity to the tribal consciousness, a consciousness which plays an important part in the growth of conscious, and especially of moral, personality. The gregarious instincts are complex in character; and "the tribal self . . . is something in the mind of each individual man which binds together his gregarious instincts." But a strong drawing to kin or kind has, as its necessary counterpart, a shrinking from the unaccustomed and the strange. In the "tribal" consciousness a place must be found for suspicion and insecurity in the presence of members of strange or hostile tribes.

[1] English translation, p. 211.

"We do not like a man whose character is such that we may reasonably expect injuries from him."[1] Nor do we feel at home with a man in whom there is such an element of the unknown that we cannot be sure of ourselves in his presence. In more advanced stages of social life, this emotional instinct shows itself in the framing of codes of conduct whereby men somewhat sternly ostracise those who do not conform to standard. Still further, and partly as a corollary from this code of the set or group, we find in the personal life a definite standing aloof from certain things as alien to us. A man is utilising instinctive as well as ideal sources of energy in holding himself aloof from anything which is "bad form" or which is unworthy of him. We are certainly able, as Adam Smith says, to take up an attitude resembling that of the impartial spectator towards our own conduct, and can condemn in ourselves behaviour that is alien to our own standards. Remorse is a *post-factum* rejection of the really alien in this sense. When the tribal self wakes up, the man says: "In the name of the tribe, I do not like this thing that I, as an individual, have done." "This Self-judgment in the name of the tribe"—these are Clifford's words—"is called Conscience. If the man goes further and draws an inference about his own character, he may say: 'In the name of the tribe I do not like myself.' This is remorse."

(3) *Anger*, like fear, is an instinctive expression of feeling. "I feel afraid," "I feel angry," is the account we give in common speech of these states. Anger might be described as an aggressive aspect of the instinct of self-preservation, as opposed to fear, which is essentially a retiring or recoiling attitude. Anger has its genesis in the primordial attitude of resentment, emphasised by Westermarck. And few examples illustrate more clearly than this that an instinctive

[1] W. K. Clifford, "Lectures and Essays," vol. ii. p. 110–13. See also Mackenzie's "Manual of Ethics," chap. v.

emotion may carry itself forward into our adult experience, though the objects towards which it is directed and the forms which it assumes may vary almost indefinitely. Speaking generally, we may find in anger the substance of the spirited element (Plato's Θυμός), which enters both into private conduct and into the public aspects of morality. In British educational history, David Stow's "moral review" before the whole school of events noticed during the week is an example of the use in mass-education of this instinct in arousing disapproval of wrong. It is only in its more unschooled forms that Tolstoi's remark holds good that there is in anger an element of assumption on the part of the angry person, an arrogating of the right to be indignant which implies that he thinks too much of himself. On the contrary, anger may reach an almost impersonal level; and be directed not really at the doer of an action, nor even at the action itself, but at the doer's own attitude towards the action. "The delight of revenge," says Bacon, "seemeth to be not so much in doing the hurt, as in making the party repent." [1] There is a sort of *double entendre* in the very decision to punish. "You shall be sorry for what you have done," may mean: "You shall be hurt enough by the punishment to wish you had not done this thing." This is most people's idea of deterrent punishment, and throws the emphasis upon "sorry." Or it may mean, "You shall be so brought to see your action in its true light that you

[1] Essay on "Revenge," quoted by Westermarck.

Tolstoi speaks of anger as an "abnormal, pernicious, and morbid state." The temptation to it he finds to lie in "separating myself from my fellows, recognising only a few of them as my equals and regarding all other persons as of no account (*rekim*) or as uncultivated animals (fools). I see now that this judgment of *raca* or fool passed upon others was the principal source of my disagreements. The more superior I felt myself to be the less careful I was of my temper" ("My Religion," p. 247).

shall be sorry for *it*" ; the emphasis being thrown upon the action, and the offender's attitude towards it being altered. Tolstoi's assertion holds good only of lower and less-governed forms of anger. In respect of the higher forms we might assert the very opposite, and say that the incapacity for resentment amounts to thinking too little of oneself as a moral agent, and implies the absence of an emotion which is part of our moral personality. Even the "rule of forgiveness" leaves room for righteous indignation.

(4) *Affection* Ribot classes with fear and anger as emotions which man shares with animals, and as having like them, therefore, a very clear character of universality. Maternal love is the most striking and universal form in which the instinct of affection is found in animals. It is the first great stand-by of those who trace moral features in the lower creation, laying alongside of the self-preserving struggle for existence a primordial and continuous altruistic element, namely, struggle for the life of others. The instinct of affection implies spontaneous attachment to its object and often the rendering of spontaneous forms of service, as is seen most clearly in maternal affection. It branches out into many directions. It is as an unbreakable thread of gold running through and through our social life. It is the very soul of home-life and the family relationship. It is the root-element in friendship, loyalty, patriotism, comity of nations, the enthusiasm of humanity.

(5) Another distinguishable emotional instinct is one to which Ribot gives the name of "*self-feeling*" (*Selbstgefühl*). No name, however, quite describes it. Observation of school children of all ages and of people in adult life goes to show that there is a broad and readily traceable distinction between what have been called the "motor" and "sensory" or the "active" and "sensitive" temperaments. These temperaments are very largely congenital, that is, are born

with the child, not acquired by him. Ribot's types of self-feeling may be regarded as the instinctive emotional accompaniments of these two dispositions. Some, as he says, are born buoyant; they manifest "positive" self-feeling in a marked degree. Others are naturally diffident; they have an overdose of "negative" self-feeling, and tend unduly to efface themselves. It is with the dawn of the child's consciousness of himself as a person, not usually, Ribot thinks, before the end of the third year, that "new emotional manifestations" appear, which tend to assume one or other of these forms. They represent instinctive attitudes towards actual situations that arise; and, in a vague diffused way, a feeling either of adequacy and readiness or of self-distrust in facing life as a whole. Nature, of course, knows better than to fix up congenital types which have no meaning; and, in the present instance, there is no need to disparage either type. Of course, we cannot wisely or justly treat these two types alike; but that is not at present before us. What we now need to notice is, first, that the distinction exists; secondly, that each form of self-feeling has its place and meaning. The effect of education, indeed, of life's experience as a whole, should be to develop in each individual the capacities of adjustment which belong to both types. The most aggressive needs to know when to yield, and the most yielding when to be aggressive.

(6) Ribot is too scientific a psychologist to be willing to leave the analysis of the *sex-instinct* to the novelist. "The novelist's mode of analysis is different from the psychological mode, and does not exclude it." From the standpoint of scientific psychology, the sex-instinct repays study in several ways. (*a*) It illustrates the way in which instinct waits its time; (*b*) it illustrates in a peculiar manner the transformations of which an instinct is capable; (*c*) it shows how effectually the instinctive may accompany the

conscious or the ideal as a source of energy throughout our life; (*d*) it subserves the ends of man's social existence. These four points are so important in the study of the part which man's congenital endowment is capable of playing in his experience that they will repay a moment's separate consideration. (*a*) The time of the appearance of an instinct is usually evidence of a connection between physiological and psychical conditions. This is a general truth, the instinct in question being merely one example, of which child-study and genetic psychology at their present stage can hardly make too much. It is imperative that the physiologist should help the psychologist. And it is matter of congratulation, not only that specialists from either camp are contributing to these studies, but that a few who have attained to distinction in both fields are amongst the leaders of the movement. (*b*) As exemplifying the transformation of which an instinct is capable, the sexual emotion associaties with itself a very wide range of emotional experience, manifesting an almost "unlimited plasticity." It fuses into "one immense aggregate," as Spencer says, most of the elementary excitations of which we are capable—pride; the pleasure of possession; love of freedom; love of sympathy; and, as directed towards the object of its choice, admiration, affection, reverence. There could be no better example of the way in which an instinct may practically change the character of its manifestation though retaining much of its congenital direction and energy. The importance of enforcing this in a study of the unfolding of personality is that we depend so much upon the fact that instincts can be directed, modified, almost transformed. If, fear being instinctive, we were always destined to be afraid of the same things; or, anger being instinctive, always to be angry at the same things; and so on: our very instincts would effectually bar the way of personal development. (*c*) In the case of the sex-

instinct, on the contrary, we find how effectually it may adapt itself to our ideas, and even to our ideals. But the original core of tendency still remains, retaining its energy and something of its old direction. Change of direction and elevation of aim may do much to lift up an instinctive tendency towards the heights of the ideal; but it remains true that the "irresistible element" is due to the force of the original instinct, and "only exists in virtue of it." (*d*) The fourth point to notice is that instincts which thus live on with us in adult experience, becoming enriched in tendency with the unfolding of our personality, subserve the ends of man's individual and social well-being. If in its more material form the sex-instinct tends to the conservation of the race, in its highest forms it subserves not only the good of society, but some of the highest ends of man's individual existence. Every healthy-minded person finds a natural human joy in seeing young people (or young-hearted people of any age) engaging themselves to each other and entering upon marriage. In spite of grievous failures, the imperative that is laid upon us—an imperative that is somehow latent within the sex-impulse itself—to exalt ourselves for the sake of a beloved works out its own good issues. Excepting only the religious impulse, there is no fundamental impulse of our nature which works more prevailingly in co-operation with the more general impulse of affection to evoke courage, industry, resolution, and to contribute to a sound and well-harmonised system of social ideals.

The chief question for the educator in this immediate connection is that of co-education. And the suggestion is twofold. Since the instinct is there and needs no hastening or encouraging, it is desirable to organise so far as possible against co-educational spare time. Also, by all not too obtrusive means within the educator's power, the aim should be to impreg-

nate the instinct with an altruistic and chivalrous tendency.

So far we have considered the emotional instincts, described by Ribot. Before turning to Herbart's valuable contribution in the same direction in his theory of original "æsthetic judgments," a word must be said as to the place Herbart assigns to feeling in our mental life. In the main he regards feeling as secondary, as in some way an outcome of ideas. True, he speaks—somewhat inconsistently with the primacy which he thus assigns to cognition—of five fundamental æsthetic judgments, which, he says, are necessary, original, and self-evident.[1] But, for the rest, he regards the mind as merely receiving ideas, which are at once material, machinery, and centres of energy in the mental process. Feeling is in the first instance an effect of this process. No interplay of ideas, no feeling; according to Herbart. But, once aroused, feeling actually co-operates in the interplay. It soon becomes the essential lubricator of the process. While ideas are the *substance* of our mental life, interest is the name Herbart gives to that energy of attraction and repulsion for one another whereby ideas are assimilated into knowledge-groups or discriminated and held apart one from another. Apart from interest, knowledge—if indeed it could exist at all—would be but a sleepy store of facts from which no volition could arise. Feeling vitalises ideas; and the activity of willing is a condition into which the mind is thrown by the definite arousal of feeling or interest in connection with ideas. Interests are thus the ground of the mind's selective activity and of a rightly ordered experience. According to this view, interests, *i.e.*, ideas associated

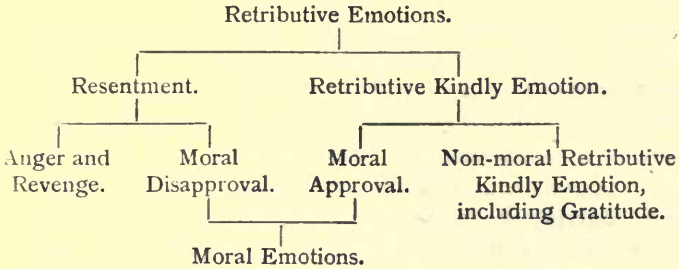
[1] In "The Æsthetic Presentation of the Universe as the Chief Work of Education." In one place, too, he speaks of fear and anger as native impulses. "Fear in many, anger in others, is the earliest natural impulse" ("Lectures on Education," par. 34).

with and reinforced by feeling, do not begin from *manifestations motrices*, as with Ribot, but they end with such manifestations. The crux of his whole system, however, is stated by Herbart himself, in a postscript to the second edition of the "A. B. C. of Sense-Perception." Echoing the words of objectors, he says that he is asked whether "sense-perception and theoretical concepts ever change into either moral or religious feeling." To appear to assert that they do is the *impasse* created by a vast insistence upon interest whilst denying the primordiality of feeling.[1]

One of the points which stands out strongly in Herbart, and which may be noted before leaving this general account of his theory, is that the real up-building of our mental life is due to tastes, not to distastes. Intellectual and moral up-building cannot be compassed by plying ourselves with negatives. Herbart is the complement of Westermarck in this respect. Westermarck gives the prior place throughout

[1] It is a strangely interesting theory, none the less. The idea of mental activity which underlies it is both vivid and graphic. Not all our ideas, it says, can be to the fore at once. Those with which the mind is not occupied do not disappear altogether. They lie in wait, as it were, on the inner side of the door of consciousness till, through combination with others like themselves, they are able once more to demand recognition. When an idea presents itself on the outer threshold of consciousness—"outer" and "inner" are highly metaphorical, since an idea to be an idea at all must in a strict sense be "inner"—his kin spur forth to meet it. This is really what is meant by saying that the presented idea is interesting. It creates a stir in the mind amongst its own kind; they join forces with the incoming idea, and there follows a combined rush towards the top place in consciousness. Feeling is thus really a form of relationship between ideas; a sort of *vis viva* immanent in them, which is roused into energy when kith calls kin. Feeling, in other words, is for Herbart "a secondary reaction." Later, we shall try to show that in these original judgments we have attitudes of approval and disapproval (these are Herbart's own words), *i.e.*, of feeling, which make feeling in certain of its phases underived, if not distinctly primary.

to repugnance and to self-protection from injury and pain. His scheme is:



Genetically, Westermarck may be right; though it is not easy to see why, even in an evolutionary sense, aversion should have priority over appetence. Educationally, Herbart is right. Personality is positive; and education, as one of the agencies of its unfolding, is positive, and must ply positive interests, even though it may ultimately imply the self-activity which, excepting in the somewhat negative form of self-maintenance, Herbart practically excludes from his account of the original self. Latent also in this theory is the suggestion that the mind (and with it the character) is only nourished by that which *strikes home*. Either to teach or to train we must awaken the activity of the pupil's mind. Our enthusiasm is good; but his is better. The arousal of our own interest is directly helpful. The arousal of the pupil's is essential. As the late Professor H. L. Withers used to phrase it, "We must begin at the boy's end."

What account, then, do we find in Herbart of the child's own standpoint? Have children for him "a real character and an essential being of themselves"? Or, do they only become what experience and intercourse, supplemented by instruction, make them? If the former can be shown to be in any sense implied in Herbart's original æsthetic judg-

ments, it may be that Ribot's list of emotional instincts will need to be supplemented from that of Herbart.

Herbart's fullest account of the æsthetic judgments is contained in the essay on "The Æsthetic Presentation of the World as the Chief Work of Education." Antecedently to strictly ethical judgments he finds in man two "wills," which he describes as a "commanding" and an "obeying" will. The commanding will he finds in the form of original acts of mind which reject whatever is alien to themselves, thus marking off the worthy and the good from the unworthy and the evil. Now, the necessity which we thus discover, Herbart says, is neither theoretical, nor logical, nor (as yet) moral. "Amongst known necessities the only one remaining is the æsthetic." The characteristic of æsthetic necessity is that it speaks in absolute judgments, entirely without proof. It arises on the clear presentation of its object. Music, for example, without explaining or proving anything, asks and wins absolute judgments of approval for its intervals, harmonies, and progressions. "In the same way we can transfer to the relationships of will an approval or disapproval like those existing for the relationships of notes." Such a judgment of taste breaks forth from the depth of the mind, and is often, "thanks to the nature of its origin," felt with a degree of force which does not strictly lie in what it utters.

This description of an original æsthetic necessity suggests an inquiry as to whether the immediate æsthetic judgments which Herbart finds implied in it are not to be included with the native emotional impulses we are discussing.[1]

[1] See Felkin's translation, p. 66; Eckoff's translation, p. 103. In all his references to the process of education, Herbart speaks of these judgments as the Ethical or Practical Ideas. This is their later form after they have acquired a content through experience, and have a distinctively moral reference. It is important for the student of Herbart to note the two distinct stages in what are often undiscriminatingly spoken of as the five Ethical Ideas or the five Intuitive Judgments.

These "judgments" are: the judgment of inner freedom; the judgment of the efficiency of the will or of perfectibility; the instinct ("judgment") of benevolence; and the two intuitive judgments of justice and equity, namely, that we should observe the rights of others, and that infringements should be atoned for. "*Tendances*" Ribot would call these, if he included them; Westermarck "emotions of approval." Herbart compares them, as we have just seen, with man's original æsthetic or artistic judgments and impulses. The individual, Herbart believes, discovers within himself a sort of æsthetic necessity along these lines. They are deliverances of the "commanding" will. The question that naturally arises is as to whether it is possible to bridge over the gap between the intuitionism of this doctrine and the pronounced associationism of Herbart's doctrines of the growth of knowledge and the source of will. How are we to relate the original "build" as suggested by the intuitive, underived judgments with the "building" which is represented as wholly due to instruction? This difficulty the student of Herbart will at once realise. Yet, however difficult to harmonise with other parts of his philosophy, the æsthetic judgments, *as emotional instincts* or *fundamental attitudes of feeling*, are really necessary to Herbart's system, if it is to be a system at all

In examining the "æsthetic judgments" from this standpoint, the question will arise in connection with each separately as to whether it is essentially of the nature of an emotional instinct.

The æsthetic judgment of *inner freedom* certainly has a claim to rank as an emotional instinct. It differs only from the specific instincts we have spoken of in that it is more general, having reference to the whole of our conscious behaviour, *i.e.*, to the functioning of mind as mind. The mind is not at the mercy of external influences. It determines in the main the direction of its own activity. The

mind as truly *directs* its present activities by constant reference to its own past, as it interprets what is being presented in terms of its past experience. We both know and acquire new knowledge with our hitherto attained knowledge as the governing condition; and we behave and acquit ourselves in fresh forms of behaviour with our hitherto acquired habits and capacities for behaviour as the chief determining influence. The mind moves forward from ground of its own occupying. This is one of the cardinal necessities in the case of an unfolding personality. All that we have been moves along with us, and moves forward into what we become. From the side of our intellectual development psychologists have given to this principle the name of apperception. From the side of our striving—the acting or behaving self—the principle may well bear the name of inner freedom. For example, we form our own intentions. The stuff our intentions are made of is not supplied solely by circumstances; it comes also from the mind's own contents. Granting, of course, that new supplies are always coming in, ideas, choice, decision are but kaleidoscopic shiftings of a content within the mind itself. It is from within itself that the mind determines the direction of its own activity. That there exists a spontaneous tendency to act from ourselves as centre, no observer of children will for a moment doubt. This strong inward urging is instinctive. By its very nature, it cannot have been taught. It is the directest assertion of an inner life or self. And its immediately personal character causes it to be strongly charged with feeling. Hence the closest description we can give of what Herbart calls the "æsthetic *judgment*" of inner freedom (but what might more truly be called an inalienable *tendency* of mind as mind) is to call it an emotional instinct. It belongs, perforce, to a behaving organism, one of whose distinguishing qualities is self-consciousness.

(7) The impulse to *inner freedom* is thus the seventh on our list of emotional instincts.

Closely related to this emotional instinct of inner freedom is the undoubtedly original factor which is present in courage. Cowardice, the negative of courage, differs from fear. There is certainly no instinct of cowardice, because there cannot be an instinct to unfreedom. The coward is the unfree man. His very intentions, or what should be his intentions, tend to lack completeness. Cowardice betokens a weak link in the chain which in the man or normal courage binds thought and will together into one act of intention or resolve. The human, even the infra-human, organic impulse is towards this unity of impression and response, the following up of a seen way of dealing with a situation with the befitting action. The man or exceptional courage is he who thinks great thoughts and acts them out, be the sphere of action what it may. General Gordon's consciousness of mission to stamp out the slave trade led to a supreme act of human daring, when he outstripped his escort and alone and unarmed rode into the camp of six thousand slave dealers and rebels at Darfoor. They were so impressed with the sheer courage of the act, bearing out as it did the reputation he had already won amongst them, that they were awed into submission. Not that they rose to the level of his ideals in any sense; but because they paid instinctive tribute to so great an exhibition of an instinctive quality of which they themselves were no mean possessors.

The second of Herbart's æsthetic judgments, that of *efficiency* or *perfection*, is the presence within the mind of the demand for adequacy. It is the impulse to remedy defects, to make up for shortcomings, "wherever a human being proves to be pettier, smaller, weaker, more limited than he need of necessity be." Growth, says Herbart, is the child's natural destiny.[1] And the æsthetic judgment we

[1] "Lectures on Education," par. 17.

are now considering he calls *Vollkommenheit*, that of coming to fulness of being. In this second manifestation of the "commanding will," we have, as clearly as before, an unlearned or instinctive tendency. And the element or feeling is also as clearly marked, through its direct reference to the self, as in the case of inner freedom. It is, in a sense, the complement of the instinct of inner freedom. *Inner freedom* says: "Function!" *Efficiency* says: "Function to the full!" The æsthetic judgment of incompleteness carries within it an urging towards completeness. This instinct towards efficiency is very like what has been called the "instinct to self-possession." We appeal to this instinct as well as to reason when we reprove a child for having "forgotten himself." Indeed, in so far as we can in these ways trace an instinctive nucleus in the impulse towards perfection, we can say that it is, in however rudimentary a way, instinctive in man to be equal to life's occasions, in a word, to be moral.

(8) The instinct of *efficiency* is, accordingly, to be included with the emotional instincts.

Benevolence, Herbart's third original judgment, has within it an instinctive emotional element, probably that of affection already spoken of. But, as it has figured so prominently in the discussion of ethical elements in our experience, its consideration is left over to a later work dealing with this subject.

Justice, whether as the preventive principle, or the principle of restoration, may also have associated with it instinctive emotional tendencies; though it probably does not contain any quite direct instinctive element.

Including at present the first two only of Herbart's fundamental emotional principles, there remain to be considered some four or five others, namely, *sympathy*, *reverence*, *a sense of dependence*, *surprise*, *wonder*.

(9) Should there be, as experience and observation give reason to think, a "subtle susceptibility of nerve which renders one individual ready to catch the contagion of the emotions of another individual,"[1] such *sympathetic susceptibility* would be instinctive. It would rank with the emotional instincts. And in it we should have, side by side with the instinct of efficiency, an emotional attitude tending to give a moral bias to behaviour intertwined with man's very being.

(10) Doubtless, too, we are endowed with an instinctive *tendency to recognise superiority.* There is, for example, an instinctive tendency within the child—and one which happily lives on with us long after childhood—which adds urgency to the command: "Honour thy father and thy mother!" Our parents are the first to whom we normally look up as superior in knowledge and strength to ourselves. To defer to superiority is instinctive; and as a conscious attitude or adjustment of the self, it has a characteristic accompaniment of feeling. It is an emotional instinct.

The recognition of superiority and the spontaneous tendency to self-adjustment which accompanies it are closely allied to *reverence.* The difference would seem to be chiefly due to a larger intellectual appreciation of the worth of the object of reverence than need be the case in the recognition of superiority. Because of the higher ideas with which it is associated, the emotion is proportionally richer, and affects us more profoundly. We may, as our appreciation of his worth deepens, pass from a more primitive recognition of superiority to reverence with regard to the same person, whether a parent, a leader, a friend, or—in a religious sense—God. But, however we come to realise the impressiveness of an object as worthy of our reverence, the faculty of reverence is inherent in

[1] Sutherland, "The Origin and Growth of the Moral Instincts," vol. i. p. 18; see also vol. ii. p. 57.

human personality. In a recent work, Mr. Frederic Harrison writes: "The instincts of the human soul towards some great Power external to itself . . . the yearning to know more of that fellowship we feel within us towards the mighty whole of which we are sons and members; finally, the desire to put forth these instincts of sympathy in some common act of adoration—these are things, we say, of vast power, utterly ineradicable from the heart of man, essential to the life of man."[1]

(11) The *sense of dependence* is not far removed from the emotional instinct just referred to. It has a somewhat more practical reference, however. We can honour as superiors and hold in reverence those upon whom we do not, in any ordinary usage of the term, say that we depend. The willingness to depend is almost a tribute to a felt superiority. But there is just enough difference in the implied relationship to separate them as movements of the mind.

(12) *Surprise* is an apparently primitive mental attitude, which is in the main a peculiar kind of spontaneous interest, aroused by a break, usually a sudden break, in the continuity of an experience. The intellectual element in surprise is less marked than in curiosity, the reason probably being that there is a certain mental discomfiture owing to the sudden disturbance of the intellectual train. It is for the moment an arrest of the mental process; though it is a less decided break than alarm would cause, because we are less overridden by feeling.

Wonder goes as much deeper than surprise as reverence does than the mere recognition of superiority. Here, again, there is a larger intellectual appreciation of the worth of the object than in surprise. And the emotion is proportionally richer, and affects us more deeply. Surprise may lead on to wonder: but only through the recognition of worthiness just spoken of.

[1] "The Philosophy of Common Sense," p. 67.

We have thus included the following twelve emotional instincts: Fear; Aversion towards the strange; Anger; Affection; Positive and Negative Self-Feeling; the Sex-instinct; Inner Freedom; the Instinct of Efficiency; Sympathy; Reverence; the Sense of Dependence; Surprise and Wonder.

As before, in order to make good the claim to call these emotional tendencies instincts, the way in which our bodily organisation co-operates with mental tendency needs to be briefly indicated. This is shown in Principal Lloyd Morgan's chapter on "Intelligence and the Acquisition of Habits."[1] He there shows how these tendencies, and, indeed, the whole of the growth of experience around emotional centres of preference or distaste, depend upon "an innate power of association." This spontaneous or instinctive tendency he finds illustrated in the behaviour of the chick. The chick instinctively pecks at what it takes to be food. It picks up an unpalatable caterpillar: but it does not, at least not soon, pick up this same kind of caterpillar again. Here, manifestly, is instinct supervening upon instinct. The earlier instinct was to peck indiscriminately at food; the later instinct was to hold off—one experience being often sufficient for weeks of inhibition—from the unpalatable caterpillars and to keep to the palatable ones. There is, evidently, some innate connection between the unpleasantness of experiences and the inhibition of movements tending to their repetition. A similar connection holds between pleasant experiences and the efforts we make for their perpetuation.[2]

[1] In his work on "Habit and Instinct."

[2] "There can be no question as to the strongly marked hereditary element in such augmentation of response when the cortical disturbances have pleasurable concomitants, and the inhibition of response when the cortical disturbances have unpleasant concomitants" ("Animal Behaviour," p. 236).

Such a conclusion is entirely in keeping with that of the two preceding chapters, which went to show the absolute importance of congenital psycho-physical foundations in all experience, and even for the beginnings of selfhood. "Hereditary likes and dislikes determine the general course of acquired behaviour, just as hereditary nerve-connections determine the course of instinctive behaviour."[1] The only difference is that, whereas in instinct the nerve-connections are transmitted ready-made, in emotional reaction the connection depends upon a spontaneous and equally instinctive associative activity following individual experience.

The part which the emotional instincts, our "hereditary likes and dislikes" with their accompanying tendencies, play in the unfolding of personality will be sufficiently evident. It is seen chiefly in the intimate way in which feeling and behaviour are related. The emotional impulses by their very nature, affect the direction both of our mental activity and our outer behaviour. Add together the moods which are developed and the actions which are performed under the impulse of anger in its varied phases and transformations—all forms of resentment, protest, antagonism, moral indignation; and to these all moods and activities arising from some shade or aspect of fear—precautions against accident, insurance against loss, sanitary and health precautions, support of armies, panics on 'Change, and so on; and to these again, the moods and activities to which we are impelled by affection, sympathy, reverence—personal care for others, the forms of charity, ameliorative legislation, religious enterprise and aspiration; and to these the characteristic attitudes and behaviours attaching to our individual self-feeling; and the zest imparted to all our activities by our sense of inner freedom, and our impulse towards adequacy—and the far-reaching effect upon be-

[1] "Animal Behaviour," p. 287.

haviour of our instinctive emotional tendencies will need no further showing.

In this intimate connection between feeling and behaviour we see part of the plan according to which we are built. "Every primary emotion," as Ribot says, "is an innate complexus expressing directly the constitution of the individual; the emotions are *organised* manifestations of the life of the feelings; they are the reactions of the individual on everything which touches the course of his life."[1] The life of the individual and the primary emotions are inextricably interwoven. Our emotional instincts are at the very heart of our personality. Accompanied, as they are, by instincts to behaviour and intellectual impulses, they are the motive forces within us tending to make us what we are. They are the mainspring of the movements which constitute the unfolding of personality, whether at the hand of Nature, or, as we are now for a moment or two to consider, at the hands of the teacher.

One or two of the educational bearings of this review of our emotional instincts may with advantage be referred to here. They turn almost entirely upon the place of interest in educational procedure.

(*a*) The first and almost self-evident consideration is that our interests follow in the direction of our fundamental emotional tendencies. We stand to gain in all our efforts to educate others, and not a little in our efforts to attain to self-mastery, by knowing the trend of the organism whose movements we wish to regulate. Plato saw that this was the royal way of moral education. To appeal to and direct the instincts of the child for the beautiful and the good will lead to his gladly receiving the beautiful and the good into his soul; he will "feed upon them, and grow to be noble and good; whereas he will rightly censure and hate all

[1] "Psychology of the Emotions," p. 93; see also p. 19.

repulsive objects, even in his childhood, before he is able to be reasoned with; and when reason comes, he will welcome her most cordially who can recognise her as already akin because he has been thus nurtured." The real interests of the child go beneath the surface. To evoke an interest that shall be deep and permanent, we must strike down to the basal tendencies of child-nature.[1] We have to distinguish in making the unfolding of personality our educational aim between "interesting" children, *i.e.*, merely amusing them; and interesting them in the deeper sense, *i.e.*, educating them. When in protest against the former kind of interest Mr. Dooley, as already quoted, says: "I don't care what ye larn thim so long as 'tis onpleasant to thim," he is not thereby riding rough-shod over the child's own craving. He is more really emphasising a deeper selfhood as opposed to a superficial amusability. The real wants of a child are symptomatic of native tendencies. They are hungers. The child, like the rest of us, would rather be interested than amused. The too easy permitting of the child to do what he pleases is not a way of respecting his individuality.[2] The child has a bigger individuality than that; and he knows it. If it were necessary to say in one word the utmost that one word could express about child-nature, it would be the word *Hunger*. The child is hungry to do things; hungry to know; hungry to admire and to love. An emotional accompaniment attaches to every instinctive tendency. These are the feelings that strike deepest; and those who, as educators, wish to build up abiding interests

[1] "Our basal tendencies determine our basal interests" (Irons, "Psychology of Ethics," p. 142).

[2] As the well-known American social reformer and writer, Miss Jane Addams, suggests, the corrupt alderman who gives turkeys, flowers, wedding-gifts, and employment naturally appears a big-hearted friend and good man to those whose education has appealed almost solely to their pleasure-loving capacities (*cf.* the writer's "Individuality and Moral Aim in American Education.)"

will take them as their foundation. If we would teach well, still more if we would educate truly, we must be versed in "the elemental passions which move in the under-world of common life."

(*b*) For, in the second place, interests rule lives. In spite of discoverable mis-applications of theory, and of the care with which we need to lay our hands to the lever of interest in the work of education, interest and right appeal to feeling necessarily play an all-important part in the up-building of personality. Herbart saw how profoundly interests influence lives, and few philosophers have gone to the same trouble as he—till quite recently it would not have been easy to name one—to work out their philosophic and educational theories side by side. It is not surprising to find Ruskin, who approaches ethical (and even economic) questions with the mind of the artist, in substantial agreement with Herbart. In his lecture on "Traffic" he says: "Taste is not only a part and an index of morality—it is the only morality. . . . To teach taste is inevitably to form character." To a somewhat similar effect, though with a tendency to give the moral precedence over the æsthetic, M. Paul Janet, reporting to the French Government in 1882 in connection with the teaching of morality in the newly laicised French schools, said: "There are many philosophies, there is only one morality. There are certain fundamental ideas without which the idea of education would be self-contradictory. There are works which are beautiful and sublime; there are also things which are low and gross. To distinguish these in literature, we must first distinguish them in morality."

(*c*) The foundations of the child's power to respond to educative influences are, as we have seen, laid in an "innate power of association" whereby feeling and behaviour are inseparably connected. There are things which he is born to care for and to care about. Bad experiences—and it is

largely decided for him beforehand what shall be "bad" to him—make him want to stop. Pleasurable experiences make him want to go on. This is really "natural selection," working through feeling-laden instinct. So sure is the working of this law that, if there is any habit we wish to form or any kind of behaviour we wish to eliminate, we must avail ourselves of it if we are to hope for success. Supposing the habit we wish to inculcate runs counter to some existing tendency in the child, we can only secure his behaviour in the new direction by making the alternative in some way attractive. The boy must be as much in the new behaviour as in the old, and slightly more so if he is to be got to substitute the one for the other. It is no case of teacher's way *versus* scholar's way. There is neither immediate profit that is of any account, nor permanent gain from that. It must be a case of the boy's new way *versus* the boy's old way. And for the boy to adopt the new, he must be got to put more of himself into it. An alternative to be effectual must preponderate in interest. There are more ways than one of making the old way distasteful. But those ways are most successful and abiding in results which set the will of the boy against it, and lead out his choice toward the new. In a fine figure, Plato compares the soul to a chariot with a pair of winged horses and a driver. Only in the souls of the Gods are the horses and drivers entirely good. In other souls one of the horses is excellent, the other vicious. The business of the driver is, therefore, extremely difficult and troublesome. For "one of the two horses being of inferior nature, when he has not been exceedingly well trained by the driver, weighs down the vehicle and impels it towards the earth." For the educator, there can be no question as to who is to be the driver. We cannot be charioteers of each other's souls. The reins must be put into the boy's own hands. One might paraphrase the title of these studies

and, still more closely plagiarising the terms of Herbart's essay, say that the ethical revelation of himself to himself is our chief work in his education. And this would not be very far from Herbart's own meaning. We hear much of moral education. Ultimately it will in all probability sum itself up in one single principle: *Put the scholar in possession of his own will.* Remind him of his will—he will be in an honourable sense the prouder of himself and of his teacher; trust, and lead him to trust, his will—each form of pride will strengthen; do this because of a belief in his "instinct to self-possession" and from a frank sympathy with that instinct; and the chances are that a personality will be developed such that the boy will retain control for life, and be in a worthy fashion the charioteer of his own soul.

(*d*) For all this the boy depends upon his teacher more than appears on the surface. Just as in the acquisition of knowledge by his class the art of the teacher is not less but greater the more he makes the acquisition really theirs, *i.e.*, the more he relies upon their suggestions, their questions, their answers to his questions, their work at their desks or in their studies; so, also, in developing taste and habits of behaviour there is really more of the educator's art implied in letting the boys come to it themselves. In seeking to impart knowledge the teacher may think that he is taking his due share by a method of lecturing, and explaining, and talking from his own point of view; whilst the unfailing effect will be that the scholars will forget both the lesson and the teacher with that wonderful knack of unloading the undesirable which youthful nature possesses. So, too, he may drive home precepts, as a few of undying fame have done, in a way that gives proof of strength of arm and of determination and makes no move in the direction of enlisting the wills of his scholars. But the inner life has not been reached; and the great truth has been forgotten that "life

develops from within." Without the slightest mawkishness on their part or ours, we might greet with welcome any spontaneous tendency on the part of boys—I speak of men-teachers and boy-scholars, not knowing how it would apply in girls' schools—to come to us, their teachers, with questions, not always about their geography or their arithmetic or for permission to go out of bounds; but sometimes to bring us confidences. To be to one's boys not merely the man who is putting them through the mill, but the man who has himself gone through the mill, who knows—perhaps in retrospect in a way that it would not have been possible or natural to realise at the time—the tug and the glow of it all, and who can by an occasional word or attitude flash in the inspiration when its need is felt—that is a large part of the schoolmaster's joy and reward. To have the confidence of the fellows, because he was once a fellow himself; the sense of comradeship, or spiritual captaincy, which this implies—so to stand before the boys is to appeal to their real nature galore. Sympathy, dependence, hero-worship (in large degree the schoolboy's reverence), even a stimulating affection, will flow out from the younger hearts; because the master on his part knows and respects their impulses of "inner freedom" and their desire to toe the line (*Vollkommenheit*).

SUGGESTIONS AND ILLUSTRATIONS.

1. "In general the real emotions should be aroused only for the sake of action" (Thorndike, "Principles of Teaching").

2. Only by allowing adequately for the force and the character of the child's instinctive hungers to behave may we hope effectually to divert him from becoming a misbehaving organism.

3. The argument which Locke makes use of against the rod as an agent of discipline is worthy of notice, namely,

that it is merely an appeal to the child's pleasure-loving, pain-avoiding instincts.

4. "In the course of teaching there is frequently a struggle of interests. The teacher . . . must learn the art of killing interest, as well as the art of rousing interest. Now the best way of killing interest is not by opposing it, but by gratifying it. So soon as an interest has been satisfied, it dies a natural death" (Professor Adams).

5. With respect to the two types of temperament conditioned by the quality of the instinctive "self-feeling," it is evident that the child will depend largely upon the guidance and influence of others if any excessive tendency in either direction is to be corrected. In later life we may ourselves come to see the necessity of a balance between the two tendencies. But we cannot expect this from the child. Suitable experiences must be planned for him.

6. Observation of children will enable us readily to collect examples of the display of emotional instincts: fear, anger, pugnacity, affection, sympathy. (An extreme case once came before the writer's attention of a girl in a private school who seemed to be utterly carried away by her sympathetic impulses. If the teacher spoke in the least degree sharply to another child, she seemed to be quite unstrung by it and had so far allowed the emotional tendency to have the mastery that she became, often for a considerable time, incapable of work. A morbid case, certainly; but it is one of the tests of purely instinctive tendencies that they do yield pathological or morbid cases of this kind. See MacDougall's "Social Psychology," p. 49.)

7. The social instincts of children are particularly observable when they work together in class. They are directly impelled by a nature which they ought not to be expected unduly to control to take an interest in one another. We should think many times before constituting

it into a school offence if a child wishes to help another in his work. Where there is no unfairness to others or hindrance of the work of others the child's social nature should have play. The "martinet" is probably not only the weak teacher but fundamentally the weak disciplinarian.

8. Fuller study may be made of the points raised in this chapter in Ribot's "Psychology of the Emotions" and "La Logique des Sentiments"; McDougall's "Introduction to Social Psychology"; Westermarck's "Origin and Development of the Moral Ideas"; Stout's "Groundwork of Psychology" and "Manual of Psychology"; Sully's "Sensation and Intuition"; Drummond's "The Child"; and, notably, in MacCunn's "Making of Character."

9. The five "Ambitious Impulses"—imitation, emulation, ambition, pugnacity, pride—referred to by Professor James ("Talks to Teachers," page 54) would, in the classification of the preceding chapter, come under the heading of "efficiency impulses." Imitation, though doubtless shading off towards emulation, has far less emotional colouring than the other four. It is dealt with in the following chapter.

10. The æsthetic sentiment is referred to on pages 213–214.

Discussion of the instincts of curiosity, imitation, and pugnacity in their blending with experience.

CHAPTER VI

THE MENTAL PROCESS: (*a*) THE BLENDING OF INSTINCT WITH EXPERIENCE

THE unfolding of personality may be viewed from three main standpoints. We may speak, as we have been doing, of man's original tendencies, ways in which he is equipped by sheer nature to maintain adjustments to his environment that are essential to self-preservation. And we may see how on this instinctive life as its foundation all experience builds. A second standpoint from which we may view the unfolding of personality is that of the normal course of mental development. Experience itself has its laws. It is as though a "hidden knower" contributed the forms under which knowledge is received. A third standpoint from which it is necessary for completeness to view the growth of human personality is that of the interplay between intelligence and choice, thought and will. By the intelligence with which he chooses and the thoughtfulness of his willing man not only brings himself into touch with a larger and richer environment, but also conceives of progress, and in some measure adapts his environment to his own ideals. This last is the ethical aspect of the unfolding of personality. It views man as at once a co-operating member of the universe and lord of the opportunities it offers him. But this does not form part of the present study.

Here we are to take up the second of the two standpoints,

that of mental process as simultaneously a growth of experience and an unfolding of the personal life.

The key-note of the study of mental process from this twofold point of view is struck in a passage in Mr. Edward Carpenter's "Art of Creation." "Why," he asks, "should 270 taps in a second on the drum of the ear call forth the fairy C♯ from the hidden chambers within? or so many billions on the retina the magical and beautiful colour of blue? . . . Allowing all we may for the gradual building up of knowledge from outside and its gradual transformation, there remain nevertheless the forms under which we receive this knowledge—from the mere sensations of touch or taste or colour or sound, up through the moral and mental qualities, to such things as the sense of self or of duty, and far beyond —which in a vast and ascending scale the ego, or hidden knower, contributes as its share to the solution of the marvellous problem." There are three things concerned in the process: the bodily organisation, the mental phenomena, and the hidden knower. Separable only in thought, they form a unity in every single conscious act or experience.

In this and the three following chapters we are to consider the mental phenomena—the mental process or laws of our experience—not in detail as they would be dealt with in a text-book on psychology pure and simple, but in their broader aspects as indicating lines of growth. And, first, in order to illustrate the blending in our progressive experience of all fresh factors with original instinctive tendencies one or two of the most general forms of instinctive tendency will be selected. For two reasons. In the first place, being general in character they will have many points of contact with our other experience; and, in the second place, the behaviour to which they lead in association with these experiences will be very varied, depending, as it must, greatly upon the occasion. Such are curiosity; imitation; sympathy.

If instincts were to be strictly defined as specific modes of

response to specific forms of stimulation, these would be too general in character to be included. But there is no need for such exactness of definition. Were we to adopt it we should need a name other than "instinctive" for these cases, and the gain would be less than the confusion.

(*a*) *Curiosity* is an attitude which the mind, in virtue of its own inmost nature and tendency, assumes towards something which attracts attention but which is only partially comprehended. The exact organ of the body that is brought into activity or attitude of body adopted—for some bodily adjustment is, of course, inevitable—does not affect the main fact that what is mainly present is a spontaneous impulse to know more about the presented object. The body is at the mind's disposal in all such cases. So far as the mental attitude or movement itself is concerned, the mind's first movement towards the outer world would seem of necessity to be one of interrogation, *i.e.*, essentially of curiosity. Judging is acknowledged to be distinctive of the act of knowing; but before we can know or judge in the presence of the unknown the mind must ask. Curiosity or wanting to know is the mind's "push-off" towards knowledge. In it the "hidden knower" first comes to the fore.

But, in the majority of the instances in which it is present, curiosity has ceased to be a pure and unmixed interrogative. It works with ideas. And, as the impulse is by its very nature strongly charged with desire, the result of this blending of curiosity with experience is seen in the rapid growth of interests in the developing mind. Curiosity may still assert itself at times in its simple and more primitive form; but for the most part it is through the energy it imparts to our acquired interests that it adds to our zest for new experiences. Owing to the ever-animating presence within us of this instinctive tendency, the mind receives nothing passively. In quickened minds—and here the spiritual tragedy of a false education is most apparent in that it

Imitation

actually deadens rather than quickens ;—in quickened minds every touch of interest, whether attaching to fresh knowledge or to a new acquirement of skill, has about it as a fringing consciousness a reference to futurity. In growing minds, curiosity is marked "crescendo." Each new experience brings with it a fresh outlook. Interest means experience with spring in it. This, it may be answered, is but another way of pointing to the mind's essential vitality. True ; and all these elements that we are tracing, curiosity, desire, interest—indeed, the whole rich store of our mental tendencies, instinctive and acquired—are but strands in the thread of development and, so, of destiny, which experience is ever spinning. They have no meaning excepting as naming aspects of the one common tendency, the unfolding of personality.

The skilful teacher, therefore, does not forget that in the mind's quest for new truth of whatever kind, an instinctive element of curiosity is always present, even when largely overlaid by the incitements left by previous trains of thought and experience. Often he will not be content to rely solely upon the energy of acquired interests in the subject-matter of his teaching ;—the younger his pupils the less will he be willing to do so. He knows the value of curiosity as the colleague and ally of interest, and will often make a direct appeal to the learner's curiosity, even in its most primitive form.

(*b*) The discussion of *imitation* is made more difficult by the necessity we are under of using the word to cover widely differing attitudes and experiences. Waiving this difficulty for the moment, imitation is certainly one of the most valuable and fruitful methods which the mind adopts in learning life's lessons. The acquisition of many kinds or skill depends largely upon it. It readily co-operates with other sources of energy.

As to the various forms which imitation may assume, the

purely instinctive element in all cases is to imitate behaviour actually taking place before us. *Traces* of this spontaneous tendency to act here and now as others are acting may be present in such cases sometimes spoken of as cases of imitation, as the working from a "copy" or the acting out of some remembered behaviour. Yet for clearness' sake we need to notice that there are other than imitative elements in such behaviour as is looked for when we ask a child to "imitate" a copy, or to "imitate" the way in which a piece of work was done the day before, or to "imitate" the example of some historical personage. A "copy" does not appeal to the child's living impulses in the same way that observing another child's—or in a less degree the teacher's—behaviour does. The almost strained attention with which children will often watch another child's effort upon the blackboard is due to something more than the mere desire to see what is being done. Quite often in cases where a lesson has gone well and the invitation to a scholar to work on the blackboard is well-timed, there is in the attention of the others to what he does an inward movement with his movements, a suppressed doing of what he does, checked only by the unwillingness to follow where the others can see he is going wrong. Here the imitative instinct, co-operating with other elements of a sympathetic order,[1] is undoubtedly present, though in a suppressed form.

[This example gives occasion in passing to note how much the strength of a personality may depend upon the presence of suppressed instincts. The amount of anger a man gives way to, for example, is usually far outweighed by the amount of temper he curbs. Impulsive energies which are kept well below explosion-point—and the stronger they

[1] Probably the imitative and the sympathetic instincts form a large part of what is often spoken of as the gregarious instinct. Class-feeling, probably a gregarious symptom, is evidently being evoked in the case above described.

are and the better they are kept down often the greater the potential energy—are none the less felt. They have their effect and receive recognition. They go to the making of a strong personality.]

As to the presence of the imitative instinct in "copying," or in behaving as I saw some one behave yesterday, it is through its combination with other mental tendencies that it is really effectual. If it were proposed to rule out the working from a copy as not being a real case of imitation at all, there would not be much ground to demur. "Copying" a dead thing is so different from imitating a live one. But in the case of my to-day, consciously or unconsciously, adjusting my behaviour to behaviour I observed yesterday, there is an instinctive quality. It is either my openness to suggestion, that is, my conscious or unconscious adoption of a receptive attitude towards the impression I then received, and my conscious or unconscious acceptance of it as somehow suitable to myself. Or, there may have been an even more immediate instinctive tendency to imitate the witnessed behaviour at the time, similar to that just spoken of in the case of the boys watching a comrade working on the blackboard. Had I there and then behaved as the other person behaved, it would, of course, have been a clear case of imitation. As it is, the behaviour is due to a blending of a deferred instinctive tendency with a certain memory of yesterday's observation.

The recognition by teachers of the importance of utilising the imitative tendency in children is so widespread that its value in education may well be dwelt upon in some detail. The method of "learning by doing," which is more and more—though it must be confessed still very gradually—taking its place in school life and work, lends itself readily to the utilising of the imitative impulse. With very young children the teacher's demonstration is often a direct appeal to their simultaneous voluntary imitation. Exercises in

building with bricks; in swinging or holding up the coloured balls; in trundling the balls—to take illustrations from the Kindergarten gifts: the teaching of action songs: many of the Kindergarten and similar games: afford examples of this direct appeal. Dr. Francis Warner teaches children the forms of letters by asking them to imitate his movements as he traces the letters by a movement of hand and arm in the air. For the utilisation by the teacher of other forms which are less strictly cases of direct imitation, the opportunities are legion; especially so, when we include the mixed form of imitation depending upon the remembrance of how others did certain things, and the impulse to do them similarly brought in by association. Perhaps the truth may be most crisply stated in the form of an epigram —though not without incurring the dangers incidental thereto: Children tend to *copy* the teacher (*i.e*, when the teacher is respected and esteemed); they tend to *imitate* one another. The teacher who wishes to avail himself of the imitative tendencies of his scholars will always remember that they learn better from one another, more easily, and more what they want to know and are really able to learn, than they learn from him. The younger the children, the more this applies. "Imitation," said Miss Dorothea Beale in a paper read before a Child-Study Society, "is the moving spirit of order and discipline in the nursery and infant school. Almost never in a good Kindergarten do you hear a command; a child goes wrong, and is left to find it out by observing its companions; most habits of punctuality, order, obedience, are acquired long ere the child can understand that social life would be impossible without them. One great good of school life is that children are helped by the example of other children, instead of having to be specially taught and corrected; thus much irritation is saved; the obstinacy which played so large a part in the old schoolrooms has almost disappeared, or has

taken a healthier form." What a class-fellow can accomplish the presumption is that others can accomplish with an effort, if not equally well, at least with some hope of success. But it does not follow that the scholars can imitate the teacher. In lessons depending on the scholars' own efforts—and what lessons do not in greater or less degree?—it is almost always better for the teacher to let one scholar talk over with (a better attitude for one and all than "show"[1]) the others how he arrived at a right result or conclusion. What, for example, is the ground of the opinion he expresses in a history lesson? What was the method he followed in solving a problem? How did he secure accuracy in a drawing? This is almost always much better than for the teacher to tabulate his own reasons for his own opinions—he may contrive to give all he is wise in wishing to give in this way incidentally; better than for the teacher to be content with demonstrating his own methods; or himself making an immaculate copy. Many a boy will spontaneously imitate his peers who would think it mawkish to ape his superiors.

Then, there is the ever-present tendency, already spoken of, to repeat in our own behaviour witnessed actions which have, if only sub-consciously, had an impelling effect at the time to act similarly. The reality of this sub-conscious tendency is beyond question. Amusing evidence of this was furnished at a recent examination in educational psychology. The illustration having been previously brought up by one of the students in class, three or four candidates quoted the experience of having been kicked by excited onlookers at a game of football. For a moment the students were suspected by an examiner of having given each other help. The real explanation was the commonness of the experience

[1] Even though the word "show" may be actually used. So much depends upon mental attitude, lying behind the words we use, in teaching.

in a part of the country where football enthusiasm runs high. The spectators had involuntarily imitated the actions of the players. Under ordinary circumstances the impulse to act as we see others acting is held in check; but doubtless it is still there. How much of school life and school success turns upon this wider reach of the imitative impulse it is hardly necessary to state. (We could probably trace a certain instinctive element in voluntary imitation; but the more clearly instinctive imitative tendencies, displayed in spontaneous imitation, are more to our immediate purpose.) A large part of the good moral tone which it is every earnest teacher's ambition to secure in his class or in his school depends upon the accumulation of similar behaviours carried forward from one day to the next. There may be subtler elements at work such as the personality of the teacher; the interacting personalities of the scholars; the easy assimilation of teacher to class and class to teacher; the common assimilation of class and teacher to the ideals of the head teacher and to the aims of the school; playground or playing-field influences; the traditions of the class and the school. All these things, and many others, count. But with all this wide margin of influences to be allowed for, much still depends upon the steady expectation and maintenance of ways of behaving, not merely because the teacher prescribes them, but because through their spontaneous adoption by some and the spontaneous imitation of others they set in and become the class or school custom. True, as Thring, the great headmaster of Uppingham, said, there is always a certain tendency to "donkey-worship" in a large school. And imitation may to this extent work against a good class-spirit or a good school-spirit. The teacher's tact, indeed, is nowhere better displayed than by his skill in making the right scholars the true leaders and so creating the moral tone which he desires. That there is a wrong and tactless way of endeavouring to do this is seen by

observing the temptation into which inexperienced teachers of young children sometimes fall when they say: "Look at So-and-So; see how well he behaves." The effect is to make little So-and-So both uncomfortable and unpopular; without in any degree making him the leader which the others imitate. The marking out of the right leaders depends upon an unspoken alliance between them and the teacher; none the less conscious and cordial on that account. And the more hopeful and encouraging expressions, spoken ever so casually, almost as if by accident, must be mainly reserved for the less promising portion of the class. There will, of course, be times when all will realise the magnanimity of a word of generous praise bestowed on the really better fellows. But there is no real analysis of tact. It is personality meeting personality—and for this there is no law.

More especially is imitation seen to be one of the factors making for success in education—whether by helping to build up a healthy public opinion or as a means of intellectual progress—when it works in combination with other factors. We imitate to best advantage when the imitative impulse follows upon and supplements impulses due to our own individual effort and experience. The boy learning to hold his bat on the village green cannot learn much as yet by trying to imitate a leading county batsman. The child commencing the pianoforte may be thrilled by the music of a great performer, but the days when the master-player can be imitated are still far ahead. To the boy beginning Latin composition with "Balbus and I were lifting up our hands" the style of Cicero, however enthusiastically rendered by his teacher, is an impossible infection.

Imitation is but a typical case. Our instinctive tendencies take no pride in maintaining themselves in rude independence of other sources of energy and acquired forms of capacity. Indeed, the higher education goes, the more

do the impulses, instinctive and acquired, which guide our behaviour and animate our whole life enrich each other by mutual reinforcement. By sheer nature, *i.e.*, without education in the form of expressly directed experience, man would grow up into something higher than the animal. But when the child's growing intelligence is met with educative influences, the result is unspeakably higher. There is not a little truth in the repartee of the distinguished educationist, the late Dr. W. T. Harris, to Rousseau's suggestion, "Let man alone"; that, "If man had let himself alone, he would have remained the monkey that he was." Or, to state the same thing somewhat differently, or Rousseau's "three educators"—Nature, men, and things—Nature and things are not true educators; at least, not in the sense in which education has just been defined. Education is essentially a human process, the work of men with and for each other, and especially with and for the young. Its two factors are, first, men, human personalities with their direct influence and power of appeal; and, secondly, Nature and things *as interpreted by men*. Education is expressly directed experience. It involves guidance and direct instruction at the hands of human teachers. The results from the spontaneous play of mother-wit in the world of Nature and things would certainly add up to something—but that something would not be an educated person.

(*c*) Another example of an instinctive tendency which blends freely with experience in a variety of forms is that of *sympathy*.

If the imitative impulse is to do as others do, the *sympathetic impulse* is to feel as others feel, almost to be for the moment as others are. But to feel as others feel, according to the now generally accepted theory of what constitutes an emotional state, is only possible through the assuming of a similar nervous, or nervo-muscular, disposition.

In purely instinctive sympathy this expressive attitude or tendency will be wholly spontaneous. There is a physical, as well as a conscious or mental, identification of ourselves with the condition of the person to whom our sympathy is being given. In true sympathy, therefore, there can be nothing of that somewhat unsocial satisfaction of not being in the same plight which at times enters into pity. It is more truly a coming alongside, a direct fellowship in the suffering or the joy. This is not, again, quite the same sort of coming alongside, the mere drawing near for nearness' sake, which is a characteristic feature of the affectionate instinct; but the spontaneous assimilation of one's own inner mood, and with it of one's bodily disposition, to that of the person with whom we sympathise. To be so constituted as to feel a pain in my brother's side, as Rousseau has put it, or to feel the lash of the slave-master on one's own back, as Abraham Lincoln expressed it in one of his great debates, and to be equally ready to enter into the joys of others, is to have the sympathetic temperament. This is neither pity nor affection. It is co-feeling, the experiencing with another his experience, the being as he is for the time. We have this constraining tendency because we are by nature "members one of another." We do not acquire it: though, of course, we may do much to foster it or the reverse in ourselves and others. It is one of the corner-stones of our social existence. Man is in virtue of it a nobler being as a "political animal," in the broad sense in which Aristotle used the word "political," than he could be if indifference to the experiences of others were possible to him.

As to the variety of the forms in which in combination with other elements it may be found in human experience, sympathy resembles imitation in the one respect that it seems to betoken a tendency of organism to respond to organism: in imitation a responding to the behaviour of another and being impelled to behave similarly; in sympathy a respond-

ing to the feelings of another and being drawn into feeling similarly. This quality of generality causes the forms in which they may mingle with effects of experience to be almost as varied as experience itself.

In school life, as examples already discussed sufficiently testify, the instinct of sympathy will often be the yoke-fellow of the imitative impulse ; and, just as the imitative impulse in one or other of its manifestations is the root-principle of a good school tradition, sympathy is probably the root-principle of *esprit-de-corps*. When a class is before us it is impossible to cozen ourselves into thinking that we can ever select a scholar for individual treatment. Almost everything acquires a public reference through the operation of sympathy. A generous attitude to one boy's endeavour awakens happy responses all round. The teacher who knows not so much how to question as how to accept answers and suggestions, knows how to win his class to himself and to effort in work even through his treatment of individuals. The teacher, on the other hand, who howls at one boy that he is a duffer or in worse ways than that loses patience with him, has not thereby encouraged the rest. No action of ours in class is of private interpretation: nor does it receive private interpretation. If a boy gives an answer that is half-right and half-wrong, and if we accept the right half both on the principle of economy in teaching and out of ordinary good-nature, we have probably put the whole class into the humour to try. Whatever it may be outside, sarcasm in school may easily bear Carlyle's description of it as the "language of the devil." Against whomsoever of their number it is directed, it will not win the boys to us or make them keen in working with us. The teacher who accepts the right half of a half-right answer, provided it represents an honest effort on the scholar's part, and who is more apt to punish with an apology to himself for having to do so than with any suspicion of zest, knows how to

Habit

convert the sympathy which inevitably holds between class-mates into his ally. The teacher, on the other hand, who habitually emphasises mistakes and reprimands with a personal sting, is in danger of turning this subtle force against himself. The class-teacher is never dealing with individuals. He is the captain of a team. He deals with individuals largely through their team-consciousness.

(*d*) The growth of *habit* is another illustration of the way in which our instinctive tendencies remain with us as elements entering into combination with other factors in the continuous development of our personality. Habits may, of course, be formed either unconsciously or deliberately and with effort. We saw in connection with the imitative impulse how forms of behaviour may arise spontaneously and often unconsciously. By repetition such forms of behaviour may become habits. It is in this way that a child acquires some of the tricks and mannerisms of his parents. The same applies largely to the accumulation of similar behaviours in class or school, spoken of under imitation.

Sometimes, as in the case of imitation, the carrying out of an impulse which becomes the basis of a habit, is delayed. We wait, not necessarily consciously, for the occasion that gives an opportunity for the impulse to take effect. For example, I observe other men carrying their umbrellas by hooking the curved handles over their arm. It is only in the faintest degree, if at all, that I am aware of the impulse to imitate them. The chances are that the action strikes me at first as affected and peculiar. Yet after a while I find myself carrying my umbrella in this fashion; and (alternating rarely perhaps with an earlier-formed habit of using the umbrella as a walking-stick) I find the practice to be settling down into a habit. Even the kind of handle I look for in purchasing a new umbrella has undergone

complete change,—though here the force of suggestion, combined with the limiting of the range of choice for which the manufacturers are responsible, probably co-operates.

Large as is the space occupied by habit in our experience, it would not be possible to discover any habit which has not some natural tendency as its central strand or core, from which it derives much of its energy and of its direction. We do not—probably cannot—form habits which are wholly against the grain. Just as in rope-making, the twisting and compounding which give the rope its strength would fail of their effect if there were nothing to give it direction—we should have gnarls and tangles and weak points to such an extent as to have no rope at all—so (though the analogy will not bear much straining) there must be the play of natural tendency in the making of habits. It is this which maintains the direction and secures the compounding of the various strands. As the rope-maker—one is thinking of the old rope-walks still to be found in several parts of the country—gives the rope its direction, contributes his strength to the inweaving of the threads, and so makes the rope; so we may be said to make our own habits, in the sense that some natural bias of ours so far gives our behaviour direction and energy that apart from it the compounding of tendencies and the forming of habits would never take place.

The habits which we ourselves consciously form or which we seek deliberately to foster in others are those of which the psychology is most familiar. The oft-quoted rules of a strong initiative; no exceptions; constant practice; and a little supererogation; are not likely to be forgotten. But a no less important rule both of economy and of success in the deliberate forming of habits is to follow whenever possible the already prepared paths. The outstanding example of this, according to certain observers already quoted, is the cat, who, it is said, cannot be got to learn tricks or take up habits that are contrary to its nature.

This may be a slightly exaggerated statement in order to point the contrast between the conservatism of the cat and the greater docility of the dog. But no extreme example is needed to give point to the rule that in the conscious forming of habits we do well to keep the path, wherever practicable, of instinctive tendency. This is the real psychology of an experience, which at one time or other forces itself upon us all: "I can be led, but I cannot be driven." When we first discover this, we fancy we have come upon some trait that is peculiarly our own,—so intimate is its association with our growing consciousness of personality. In reality, it is the universal law. And, obviously, it is the wisdom of the educator, who is *par excellence* the former of the habits of others, to follow the line of least resistance. Here is the value of child-study to the teacher. It gives him knowledge of the native tendencies that are at his disposal. It helps him to understand what alliances can be set up between his aims and ideals and the instinctive and nascent tendencies in the scholars before him, be they six, eleven, fourteen, or eighteen years of age. Habits after all are of the individual's own growing. Every man has *his own* habits. They spring from the soil. Grafting may be possible upon a kindred stock; transplanting never. That is to say, we do not plant in ourselves or in others the roots of habit. Habits grow from roots, the native tendencies or "root-tendencies," that are already there.

Habits are always in the making; if for no other reason, because we ourselves are always in the making. It is true of us all, but particularly and self-evidently true of the young, that there are root-tendencies which have not yet reached the surface. There is the nascent, that which we are becoming or are on the point of becoming, in us all; there is also the latent, that which to all appearance we have in no way begun to be. Some one has said: "Our hearts

unless they are stirred are like tombs in which the Gods lie buried." And there is always something of the Unknowable Energy in us which has not yet stirred sufficiently to shows signs of its life above the surface. Habits thus must always be in the making. Either to meet new outward conditions, or to express a newly developing inner life, our behaviour must needs change. "Failure," as it has been penetratingly said, would be "to form habits." There could hardly be a severer indictment than to speak of man as a "bundle of habits." To regard a man's habits as other than in the making—however useful for present purposes our habits may be—is to misconstrue the process of human development. Not only may habits be modified either to meet new conditions or because of newly manifested or newly directed native tendencies, but one habit may actually be got to replace another. Good habits may drive out bad, and—unfortunately—bad habits may drive out good.

To quote a striking experiment: There is in Freeville, at the north-west corner of New York State, and a few miles from Cornell University, a reform settlement which goes by the name of the George Junior Republic. Some of the worst and most neglected of city arab children and youths (both boys and girls) are taken in as members of the "junior republic," and as such they live out in community fashion the conditions of ordinary free social life. The Junior Republic, bearing the name of Mr. W. R. George, its founder, exists to give such youths and girls a chance. It gives them a new environment; it gives the occasion for hitherto latent impulses to reveal themselves. The older boys and girls work, the younger ones go to school. There is, in ways too intricate to be described here, a reproduction of the conditions of the ordinary industrial and civic life of the outside world. It is, in intention and in fact, a junior republic. There are a Junior Republic currency; law courts in which the citizens themselves plead and judge; prisons;

prison-gangs and warders—a remarkable fact being that the percentage of Junior Republic criminals, as compared with the total number in residence, is practically identical with the percentage of criminals in the population of the United States as a whole. How does this result come about? There is no creation of the good nor thought of such. No one could interfere less with the actual incidents of the republic life than does Mr. George himself. He lives there; is beloved as he deserves to be. But he would not think of intervening excepting as a fellow-citizen in any of the republic's affairs. If there is a breach of the law, the Junior Republic police deal with it, not he. Mr. George does not start with the idea that the good impulses need to be created; to be somehow wrought in from without. He believes in the store of undiscovered good in every nature; in the presence of true human instincts everywhere; and that from these alone can a new beginning be made and new habits formed. In describing the process as he observes it, he said: "If a boy is lazy when he comes, before long he is going to be industrious, even if he is not naturally so inclined; and even though he may have bad ancestors, generations of the pauper class. *Habit comes to the rescue;* and he gradually acquires habits of hard work." [1]

This example on a large scale of the growth of good habits in place of bad, yielding so high a percentage of successes, forcibly illustrates the truth that our habits are always in the making. The change in a great proportion of cases has proved to be a radical one. What, then, is the process? A reformed youth is one who has built up a new

[1] A fuller account of this remarkable work, which has long attracted attention as a sociological laboratory amongst professors of economics and allied subjects in American universities, will be found in vol. x. Board of Education "Special Reports on Educational Subjects." Appendix to the present writer's report on "Moral Education in American Schools."

set of courses of behaviour around a new centre. But the new centre is as radically and essentially a part of him as was the old one. Reformation is not a process of leaving behind instinctive tendencies and assuming tendencies acquired *ab extra*, as at the suggestion or compulsion of another. Nor is any form of education. We are always ourselves. Life always "develops from within." Criminal tendencies may be perverted instincts; but our instincts are not themselves perversions of our nature; they are part of it.

If, then, we wish to build up a new habit in ourselves or in others, our first reliance must be upon such instinctive tendencies as will lead in the same direction. The range of our native capacity is such that it can always provide us with a fresh start. An almost unlimited number of alternatives or variations in actual personality is potentially ours. By change of environment, and still more by a change of attitude, we may discover fresh strength-centres within ourselves and build around them a network of new habits. The failure of many "reforms" to be permanent, the lack of staying power in many of the "converts" during a revival, is easily accounted for by the fact that the "reform" or "conversion" has been due to some external shock or pleading. The impulsion has been from without, not from within.

Enough has been said to bring into view the fact that habit receives its push-off at the hands of instinct. Every successful moral educator both knows this and adjusts his methods to it. He studies his scholars; and fits his methods to them. But the growth of habit is none the less due to a compounding of tendencies. It does not spring up whole and sole out of the roots of instinct. Topsy's "spec's I growed" would be a very imperfect piece of natural history if the reference were only to a cultivated flower, still more if the reference is to an educated child, or to a consciously acquired or imparted habit. The whole mean-

ing of education lies in its being a planning of some at least of the experiences through which the child shall pass. All that we are saying is that in our wisest planning we take into account nature's own courses in the child, and aim of new developments as far as possible by making use of existing, though perhaps latent, native tendencies.

(*e*) We might go through the whole round of our mental experience in illustrating the truth that the unfolding of personality, viewed as a mental process, consists of a blending of the native and the acquired. The acquirement of speech may be taken as typical. Nothing better illustrates the blending of instinctive tendency with the results of individual experience than the child's acquisition of language. (i.) The babbling of the infant is a wholly instinctive use of the organs concerned in speech. (ii.) Imitation soon enters in and leads to the production of sounds which have a meaning. (iii.) The child's imitative effort is invited, and every partial success encouraged. Education, as guided experience, is already coming to his aid. (iv.) Assisting the development, and as yet practically independent of the intellectual constructive tendencies, is the ever-operative instinctive tendency to give outward expression to inner feeling. Amongst the various modes of such expression, expressive sounds very soon have a place. (v.) The early successes in fitting together sounds and meanings are momentous. The mother's nod and smile—and still more the proofs in the behaviour of others that the young child's utterances are understood—bring in palpable reasons for cementing the successful alliance. From this time forward the child's speech becomes the greatest indicator of his mental development. He shows by it, as he can in no other way, the number of meanings he comprehends, and a power of more or less exact adjustment in the expression of meanings. Henceforward there is a line of direct progress between the power the child has now acquired and the

highest flights of oratory and poetry or the subtlest discriminations of philosophy. Impulse and education combine to produce the result.

The course of the child's acquisition of language also illustrates the further fact (implied in all that has been so far said and to be more fully brought out in the chapter following) that an acquired capacity not only is a sign that a certain stage of development has been reached, but becomes an actively co-operating factor in further development.

Observations of the use and progressive acquirement of language by children, continuative of that proposed at the end of the fourth chapter, would serve to test and to amplify these points. A valuable piece of work of this kind is to be found in the *American Journal of Psychology* by Mr. Frederick Tracy.[1] A careful examination of the vocabularies of twenty-one children (ages ranging from 9 months to 2½ years, mostly from 19 months to 28 months) showed an average use of 20 verbs to 60 nouns, whereas the English language is estimated to contain but 11 verbs to every 60 nouns. Mr. Tracy regards this fact as supporting the view that the acquisition of language in the individual and in the race proceeds by similar stages and along similar lines. "Max Müller says that the primitive Sanscrit roots of the Indo-Germanic languages all represent *actions* and not *objects*. Educationally, it goes to confirm the more and more widely accepted principle that education proceeds most naturally (and, therefore, most easily and rapidly) along the lines of motor activity."

(*f*) One or two examples of the *acquisition of skill*, which is partly a question of habit and partly of adaptability or of alertness and adequacy of intelligence, will conclude the present chapter.

If it is not too direct a reference, the acquisition of skill in teaching well illustrates the blending of native

[1] Vol. vi., No. 1.

capacity with the fruits of experience. The uniformity with which children "play at school"—a union of imitative and teaching instincts; the pleasure every one has in giving information even in the ordinary course of conversation; go to show that the teaching impulse is in some measure born with us. We seem spontaneously to recognise that one of the uses and responsibilities, as well as one of the pleasures, of being possessors of intelligence is that we should share our knowledge with others. Yet though the impulse is born with us, and some are even "born teachers," experience gives us our art.

The great artist, again, has always a rich original endowment, but his greatness by common testimony depends yet more upon his "infinite capacity for taking pains." He is always in some way or other a performer. If he is born with a fine ear for music, he has to school his powers of touch or of voice and become a great executant before he is a great musician. The painter has an open eye for the beautiful, but he can only produce great work after assiduous practice with brush and palette. The familiar answer of the ancient orator when asked the secret of eloquence was "*Actio! Actio!*"

There is no putting forth of power in any direction which is not a resultant from the two co-operating influences—native endowment and acquired ability. The more these are brought into line the greater the power evinced; and the freer and more natural the progress.

SUGGESTIONS AND ILLUSTRATIONS.

1. "Springs of conduct are the instincts given by nature and the ideas given by education" (Thorndike).

2. The child's (and our) methods of learning are partly spontaneous in character, partly acquired. It is becoming customary to note three such methods: the method of trial and success ("hit or miss"); that of imitation; and the

method of learning by the use of ideas. Examples of each of these can easily be obtained by watching children carefully in school and elsewhere. The behaviour of younger children usually gives the observer simpler and, therefore, clearer cases. But the three methods are always liable to overlap.

3. All cases of the combining of elements in the upbuilding of experience are examples of the selective working of the mind. Attention itself, without which there would be no elements to combine, is selective; and selection is present no less in every act of mental combining or blending. Apperception is selective. Memory is selective. Imagination is selective. Judging and Reasoning are selective. The building together or blending of ideas and experiences in the mind to form our knowledge follows, however, more than one path. The selective principle in apperception is the identifying of certain portions of a new experience with some previous experience. The selective principle in memory is that of contiguity. Imagination selects under a practical or theoretical or artistic impulse with the view to some result. Judgment and reasoning take from a wide possible field very definite data and put them together in the assertions which they enable us to make.

4. There are certain typical forms of arrangement of the materials entering into our knowledge-structures on these lines of selectivity. (*a*) The purely associative principle of arrangement is that of *contiguity*. The simplest form of knowledge-structure is constituted by the holding together mentally or in memory elements of experience which actually occurred together. (*b*) Another form of knowledge-structure is due to the mind's *co-ordinating tendency*. Classification, the forming of general ideas, naming (use of group-names, "common nouns"), are all cases of co-ordination. The little child spontaneously picks out beads from

beans, and puts them into separate heaps; or blue beads from red beads. Quite as spontaneously he wants to know the names "bead," "bean," "blue," "red." When he asks "What is it?" he is usually content if we give him the name. He is in this empirical fashion working his way towards general ideas. (*c*) A third form of arrangement into which knowledge tends naturally to fall is the *progressive*. Counting is progressive: so is the musical scale; so are ordinary arrangements of cricket averages, or more serious tabulations of measurements, or results of scientific experiments; index numbers; and graphs. The tendency to arrange progressively or in series leads to one type of knowledge-structure. (*d*) *Rhythmical arrangements* fit in also with an evidently native mental tendency. Many of our acquired movements are rhythmical. Poetry and melody appeal to the tendency to build mental elements together in this way; and many decorative forms practically exemplify the same tendency. (*e*) *Apperceptive grouping* differs but slightly from the co-ordinating tendency: indeed, it might be said to include it. But in apperceiving in the higher sense we not only enrich the circle by adding new members to the group; but we intensively enrich the group by the new insight into qualities and the inclusion thus of a wider range of qualities. (*f*) Under apperception in this larger sense we might certainly include some of the mind's *thought-constructions*, but it may be less confusing to regard these as a separate type. Judging, *i.e.*, mental assertion with a more or less clear consciousness of the grounds for making it, is the characteristic thought-activity. As a form of knowledge it consists in a grouping of possibly otherwise separated elements. If a child says this bead is blue, he is only analysing the whole percept, that of the blue bead which is before him. But if he says, "The best bananas come from Jamaica," he is putting together elements which apart from the actual mental assertion

(made on, to him, adequate grounds) would never have fused or been part of one whole of experience (or formed a unit of knowledge). Reasoning is a complex process of arriving at a judgment.

5. A valuable little book for further reading is "The School and the Child" (papers by John Dewey, edited with Introduction by J. J. Findlay). Reference might also be made to James's "Talk to Teachers on Psychology"; Thorndike's "Notes on Child Study"; Kirkpatrick's "Fundamentals of Child Study"; and to Drummond's "Introduction to Child Study"; John Dewey's "The School and Society"; Dr. Sophie Bryant's "Teaching of Morality."

CHAPTER VII

THE MENTAL PROCESS: (*b*) THE CONTINUITY OF THE MENTAL LIFE

WE have now seen that instinctive tendencies persist. According to the illustrations we have just considered, they are a sort of connecting-thread running through life's activities. Alike in the pursuit of knowledge, in imitation, in the forming of habits, instinctive tendencies are always blending with new experience, helping to make each experience what it is. The primary tendencies persist; and we have now to see that persistence is the underlying law of the whole mental process, and to view the unfolding of personality, whether spontaneously or at the hands of our educators, in this aspect.

(1) In our use of the terms "I" or "me" we always mean something more than a momentary consciousness of existing now. The "I" or "me" is, to the mind that interrogates itself, a something which *was*, as well as is, and a something which we expect to *continue to be* after the present experience is passed. The consciousness of going on is given to us in and with the fact of our mental activity. Of mental activity itself many psychologists believe we are not aware. But of the touch of the past upon the present, and an outlook from the present towards a future, we seem to be so fully conscious that we may find in it our first direct hint of the continuity of the mental process. Especially if we add the contribution that comes from the side of feeling—"Richard loves Richard; that is, I am I"—the

intuition appears immediate and undeniable. The common-sense belief in the continuity of the mental process and of personality underlies all educational procedure. The schoolmaster believes that the self-same scholar whom he was teaching or exhorting yesterday is present in *propria persona* in school to-day; that the boy he teaches to-day will be one and the same boy to-morrow. Hence he expects the boy to remember yesterday's lesson, and to realise obligations or to receive instructions as to to-morrow's performance. Education could not proceed far were it not that the scholar retains and is expected to carry forward a specially intimate personal interest in his own experiences. The schoolboy, who was questioned with regard to a certain episode in his school life, would not have replied in the words of Virgil: "*Infandum, regina, jubes me renovare dolorem*," were it not that school experiences have a persistent personal flavour. The very first essentials of an educable self are that it persists, and that it cares.

(2) Taking up the question in more detail, we note, first, a distinct continuity between one moment of consciousness and the next. Each moment's experience has in it some colouring from the immediately preceding experience, and contains also some anticipation of an experience which is expected to immediately follow. Using the figure of a wave, the crests of which represent the successive phases of consciousness, the crests, as in the case of actual waves, always have relation to the parts of the wave preceding and succeeding.[1] The meaning of a sentence, for example, and our comprehension of it depend upon the reference of each word to what has preceded and to what

[1] Even Bain, in speaking of the relativity of sensation, *i.e.*, its dependence upon transition or change from one sensation to another, refers to the state we have passed from as an implicit consciousness. For a brief criticism of the non-continuity theory, see Bosanquet's "Psychology of the Moral Self," pp. 14–17.

is to follow. Thinking is a continuous process of glancing back and looking forward.

(3) Again, if we take the field of consciousness at any moment and compare it with the fields preceding and succeeding it, we find that part of the field is relatively permanent, whilst other parts are rapidly changing. In this relative persistence of parts of the field there is a distinct bond of continuity between the successive experiences. "At any given moment we have a certain whole of presentations, a 'field of consciousness' psychologically one and continuous; at the next we have not an entirely new field, but a partial change within this field."

(4) New experiences are always interpreted in terms of past experience. This law of apperception, whereby the mind "attends with" ideas it already possesses to ideas newly presented, is but another way of saying that continuity between past and present experience is absolutely necessary for the purposes of knowledge.

(5) Simple memory experiments can be made which show that experiences maintain themselves in memory in the groupings in which they actually occurred, and that they hold together and pass on as elements in our accumulating experience in this form.

Following the lead of Professor Cattell and Dr. Sophie Bryant, a number of experiments have year by year been tried by the writer with classes of students, the method being to read out a word and ask the students to write down the first thing suggested by it, thus:—

Word Read.	*Idea Suggested.*
Snow	White.
Late	Punishment.
Time	Flies.
Sheep	Wool.

In one class "Registrar" suggested office (in two

cases), registers (in three cases) marriage, man (two cases), university (two cases), dean, entrance (the registrar's office being till recently near the main entrance to the University), absence (absences being reported to the registrar), pen (the student remembering writing the letter in which he applied to the registrar for admission), room in corridor (the registrar's room), Mr. —— (the registrar's name). "Card" suggested membership, white (2), whist or playing (2), game (2), address (2), paper (associated with card as contiguous writing materials), admission to class, printing, Christmas. In only one case, namely, "paper" as suggested by "card," is there any appearance of suggestion through similarity, and that was explained by the student himself as above.[1]

[1] The published account of the experiments performed by Professor Cattell and Dr. Sophie Bryant (in *Mind*, vol. 14, O. S.) included a reference to this suggestion of similar things. To this kind of contiguity the experimenters gave the name of logical or inner contiguity, as distinguished from contiguity in space or time. An idea is logically contiguous to another, and may be suggested by it, when it is related to it as genus to species, or as species to genus, or as one species to another through some easily traceable genus. In view of the still oft-quoted threefold law of Association, namely, of Similar things, of Contrasting things, and of Contiguous things, it is worth noting that the inner or logical contiguity traced by Dr. Bryant and Professor Cattell is practically the same as what has been called the Association of similar things. Ribot's suggestion that the Association of Similar Things has in it the elements of a judgment is somewhat akin to this description. Relating genus to species, species to species, may really involve a rapidly formed judgment. Ribot says: "Je suis avec ceux qui la tiennent (l'association par ressemblance) pour composée, l'association par contiguité étant seule élémentaire." Part of such association he speaks of as "le résultat d'une opération logique inconsciente," and so is led to ask, "Quant à l'association par ressemblance, elle soulève le problème : est-ce une association ou un jugement" ("Logique des Sentiments," pp. 6, 8, 16–17).

Professor Stout, who was one of those who took part in Professor Cattell's and Mrs. Bryant's experiments, expressed the view that there might be disturbing conditions attaching to effort of this kind through the necessity of finding a verbal expression for the revived idea on the spur of the moment. It would be quite easy to collect less artificial instances. Class-work affords ample opportunities for this. The following is from the writer's own experience. One of our red-letter experiences as children in the old home was in summer-time to have tea in the summer-house, especially on Saturday when *pater-familias* could be of the party. New bread and butter (the bread freshly brought in from the baker's) was permitted on these occasions, and fruit was frequently gathered from the trees in the garden and eaten with it. On a summer evening some nine or ten years after, I was walking past a cottage which stood back in a garden on the outskirts of the Forest of Dean, and happened to hear the clatter of cups and saucers from the open door as I went by. Suddenly the somewhat distinctive flavour of red currants with new bread and butter came back, and so vividly that I seemed to have the taste in my mouth. It took some little time to puzzle out the explanation. Using symbols, what actually had taken place might be represented very simply. *S* (summer), *E* (evening), *O* (out of doors), *CS* (sound of cups and saucers), *F* (flavour spoken of), were the items in the original experience. The traces left in the mind would be—using, as is customary, small letters for mental images or ideas left by experiences—*s*, *e*, *o*, *cs*, *f*. Nine years after *S*, *E*, *O*, *CS* recurred in actual experience in a way which revived, through their practical identity with the earlier experiences, the mental images *s*, *e*, *o*, *cs* left by those experiences. But with the ideas left in the mind by that experience, that of the distinctive flavour, *f*, was inseparably bound up; and now it came vividly back,

recalled by the force of contiguous association. Through all these years the grouping of the early deeply impressed experiences had been maintained in its integrity. That is to say, elements which had been contiguous in actual occurrence remained contiguous in idea, and had continuously maintained themselves in this definite grouping till an appropriate stimulus, reviving certain of them, served to effect the complete recall. The continuity of our mental life could scarcely be more clearly proved. Mill confessed to finding an indication of permanence in the phenomena of memory and expectation, which no explanation based solely upon the weaving together of the elements of experience through the association of ideas could account for.

(6) Then, to recall what was said in the second chapter, the whole upbuilding of mind is conceived of as accompanied step by step by certain modifications of the nervous organism. No single conscious experience leaves our nerve and brain structure as it found it. This is the neural or physiological basis of memory and of habit. Such modifications tend to be permanent. And in the permanence of the physiological modifications on which memory and habit to so great an extent depend, we have a suggestion, if not a guarantee, of the permanence of the psychical elements which are associated with these modifications. For what has happened on the mental side is that past experiences have grown together, and the mind has passed on by continuous stages from a lower or simpler to a higher or more complex development.

(7) Doubless, if it were asked : In virtue of what is the mind a unity ; in virtue of thinking, or feeling, or willing ? the answer would be : In virtue of all three. But it is the third of these which, in a special way, plays the part of a *nexus* within the mental life, and helps to bind all together into a unity. Some would account for this mainly through the setting up of nerve-modifications. Without empha-

sising either the physical or the psychical, it is certainly due to the fundamental law of the psycho-physical organism—however the law itself is accounted for :—"*No impression without expression.*" Thoughts as thoughts would have no inherent capacity for cohesion—so far, at least, as human experience goes—apart from their relation to an organism of which responsive behaviour is the primary characteristic. In so far as Hume was right in saying that when he looked inward he always stumbled upon some particular sensation, he was right in adding that he was unable to find continuity and that he could trace no principle of identity whereby the mind is able to "run the several perceptions into one." For, apart from the responses within the organism to which they give rise, impressions would probably never fuse. They would be now this, now that ; a series, not a unity. If, as it seemed to Hume, mind consists wholly of successive impressions, he was fully justified in denying to mind or to the self any realisable continuity of existence. His view of mind may, as one of its critics has said, have been comparable to "a string of beads without the string," but it must also be admitted that impressions as such do not bring their own string with them. As Hume saw, his view yielded blank scepticism ; no real self was discoverable. But, as Hume did not see, the faculty of reacting or responding makes all the difference. We are, if only indirectly, indebted to him for showing that, apart from doing and learning to do, the self would fall to pieces. There would be no self ; no persistence ; but only perceptions "different and distinguishable and separable from every other perception."

Moreover, the continuity of feeling, no less than that of thinking, depends upon connective and expressive behaviour. There is an obvious connection between organic activities and the persistence of physical pain or pleasure. And, with regard to our emotional life, there is a large amount of

truth in the view of James and Lange that expression alone sustains it. "Faithfulness can feed on suffering," as the heroine of George Eliot's "Spanish Gipsy" says, because it is in actively bracing oneself to endure that faithfulness finds its most real expression. It is action in the line of our emotions which gives them permanence; connects them up, so to say, with the rest of our experience.

(8) It is an extension of this same argument, but capable of being asserted with scarcely less confidence, that consciousness itself is essentially a form of activity. There are many direct indications of this. In *trying to remember*, we seem to be aware that the mind "begins to move in certain directions"—towards, say, a forgotten name. *Desire* also is a movement of the mind towards an object. And we often speak of a man's *constructive thinking* as "striking out a line for himself." Again, whether or not I am aware of an "object," which is physically within the range of hearing or of vision, say, a tree in a garden, depends upon the direction in which my mind is moving, rather than upon the presence of the object. From this point of view, as Stout says, "we can bring under conation all that is covered by the word *attention*. Attention is simply conation in so far as it finds satisfaction in the fuller presentation of its object, without actual change in the object."[1] Truly, an external event can exert itself momentarily in such a way as to compel attention to it. (The supply of those who are prone to go off into fits of abstraction, and not to be aware of what is happening around them, is probably quite adequate to the world's demands.) But even so, both the amount of attention and the time given to an externally arresting occurrence depend less upon it than upon the mind itself. If we were previously engaged upon some task, we can soon pick up the thread and work on along the old lines. This power of resuming the direction of

[1] "Manual of Psychology," p. 71.

our mental activity points to a very real continuity. Our *apperceptive activity* also lends itself to a similar interpretation. The term "apperception" is ambiguous and some psychologists are ceasing to use it; but it has a value in educational theory which makes it worth retaining. But if we retain it we must regard it as naming a process which is concerned with something more than ideas. It is the moving on from one whole experience to another, and the interpreting of the new experience as a whole in terms of the old. Ideas, that is to say, do not interact or co-operate independently. Impression and expression, idea and response, together with the core of feeling or interest which directly refers the whole experience to the selt, are inseparably bound together in the process. With much genial humour Professor Adams describes in his "Herbartian Psychology" the view of apperception which relates it merely to the coalescing and growing together of ideas. In almost athletic phrase he pictures the struggle of ideas for the top place in the mind. "An idea's first visit to the dome seldom lasts very long. He has few friends and many enemies. He soon sinks to the threshold and passes out into a longer or shorter exile." For Herbart, whose theory Mr. Adams is discussing, apperception was nothing but a relationship between ideas. He was under the necessity of imagining a kind of place-seeking, a dependence upon introductions and alliances in order to picture the growing together of groups of knowledge in the mind. Herbart was compelled by his view of an inactive mind or soul to invest ideas with a self-activity which they do not possess. But, as a matter of fact, we are not driven to imagine such impossible combat and intrigue. The alliances which Herbart saw were established, and which he sought to explain, are not merely between ideas and ideas; for ideas are but phases, the cognitive aspects, of experience. The apperceptive alliances exist between experiences as wholes.

Regarding experiences in their entirety, the truth thus seems to be that, however justifiable it may be to regard each mood or mode of mind as some sort of awareness (a cognition), charged with a certain warmth of feeling due to its intimate association with the self, it is at the heart of it an activity (a conation). This view of consciousness as an activity is more fully worked out and illustrated by Professor Alexander in a paper published in the Proceedings of the Aristotelian Society (1907–8). "My mental activity," he there says, "is always qualified by what, on the analogy of local signs, I must call signs of direction." Our very consciousness is a matter of the directing of the mind this way or that. Ideas and feelings would yield us but a confused blur but for this selective or directive activity. This interpretation of mental process harmonises with the familiar metaphor, the *stream* of consciousness. It is of the essence of a stream to have direction. No direction, no stream. In a somewhat similar way, the directive activity we are speaking of is of the essence of the mental life. We move on to our experiences. The thinking subject, as Dr. James Ward says, must be credited with the power of variously distributing the attention upon which the intensity of a presentation in part depends.[1] In other words, consciousness is an activity in this completer sense also, that we largely contribute by the direction of our attention to the course which our mental activity takes.

(9) Even at the risk of minuteness, there is one other aspect of our mental life which must be brought forward in illustration of the real continuity of experience. A forward-looking tendency, which has been spoken of in an earlier connection, is present in all our consciousness. Knowledge is not merely a possession; it is a quest. Action is more than mere doing; it is a striving. Interest

[1] Art. "Psychology," "Encyc. Brit.," 9th ed., p. 44.

is more than passing pleasure-pain; it has in it a self-sustaining quality as attraction or aversion. Before considering separately the presence of this forward-looking element in active self-determination, there are one or two other forms in which it appears which may be referred to. There is what might be called rational anticipation, or anticipation of the natural consequences of a present experience. There is imagination, in the more constructive sense of the term. There is attention, which is usually more than a mere focussing of consciousness upon what is immediately before it—because the selection which this implies is purposive, *i.e.*, has a forward-looking aspect. And there is curiosity, which scrutinises what is presented usually with some sort of business intent. Such facts form an important part of our general idea of mental activity. They mean, as in its fullest interpretation mental activity itself means, that the mind has in it a something, which is of its essence, which impels it to project itself and its experiences forward.

With regard to *rational expectation*, there is obviously a difference between an experience merely had and done with, and an experience from which some thought of what is to follow it, and to follow from it, cannot be disentangled. The latter is what we normally find. It appears to be inseparable from the notion of mind, that we think of it as in some way working forward from its own experiences. It is part of the very "conception of there being an order of things," as Green says. It is only as governed by "the forecast of there being a related whole" that the processes of sensuous experience can yield a growing knowledge of what the whole is.

As to *constructive imagination*, it is evidently more than a mere re-assorting of the elements of past experience. Only two such processes of re-assortment would seem to be assignable. Either, we have to conceive mainly of a

mingling of ideas, the sorting process having much the same character as the competing between ideas in Herbart's theory; or, the re-assortment is due to the activity of the entire mind and to the necessity, which the environment throws upon it, of casting its materials into new forms to meet changing conditions.[1] But in the former case, the right of a certain group of ideas to top position and to the controlling of the constructive plan is striven for for some further and more practical reason than mere pride of place. The ideas that get to the top and fix the plan do so because the mind, th "hidden knower," has in view the actions which are to follow. And in the latter case, we have even more obviously a re-assortment that is adaptive or purposive in character. Materials already in the mind are used, but the glance of the mind is forward towards some new adaptation or adjustment. The venturesome guess of the schoolboy indicates a forward-going activity of the mind in the hope of rising to new conditions. So, too, when the scientist experiments, he makes use of knowledge already gained with a forward intent.

Curiosity, again, is but an instinctive phase of this deep-seated tendency of the mind to push forward, and, by probing the new or the unknown, to fashion for itself new experiences.

The same may be said of *attention*. Even primitive spontaneous attention involves tendency towards an end.

In *volition*, as in all forms of conative consciousness—wishing, longing, aspiring, and the like—there is also a distinct reference to the future, a looking forward towards satisfaction or fulfilment.

In a variety of ways the continuity of consciousness, especially as a process or an activity, has now been

[1] Cf. Baldwin, "Social and Ethical Interpretations in Mental Development," chap. iii., especially pp. 99 and 121.

illustrated. It is true that we often hear of the discontinuity of consciousness. But even if consciousness could be proved to be discontinuous, which is very doubtful, there would still be a sense in which we could speak of the continuity of our mental experience.

Discontinuity, as commonly spoken of, is of one or two kinds. It refers either to a supposed suspension of consciousness, as in sleep, swooning, the hypnotic trance: or to a development of the mental life at critical points by leaps, rather than by gradual stages each of which can be shown to be causally connected with its immediately antecedent stage. But to take the supposition of suspended consciousness: even were it so, the mental life still goes on. A certain continuity must be postulated for it, or we should not find the mind, after these supposed lapses, capable of picking up the threads of its experience. The portions of our experience "are not separated from one another by something which is not mind." There is still a *continuity of experience.*[1] Again, taking the suggestion of progression

[1] As to continuity of consciousness during sleep—the following points may be urged: (1) If I am called by name I wake up as I should not if another name were spoken; (2) A mother sleeps with part of her mind awake to her child's call; (3) Such consciousness as I do have in dreaming relates to myself, even though it be a self posing in an unaccustomed guise; (4) I can affect my dream-life by steady thinking before falling asleep; indeed, I feel I cannot entirely shake off responsibility for my dream-life; (5) Suggestions can come and problems be solved in sleep; (6) Not only can many people wake up at the time they want to; but they can frequently tell the time (in a way not completely accounted for by outward signs, such as amount of light) when they wake up—as if there were a more or less distinct consciousness of interval; (7) We pick up the threads of our overnight thinking when we awake. This bridging over of the interval can only be explained in one of two ways, either (*a*) there has been a temporary suspension of mental activity, accompanied by a sub-conscious maintenance of the mental

by leaps, for which the results of recent researches into plant-life and into the development of new species present an analogy, there is still the carrying forward of the earlier in all later development. Elements from the past get across, even if we cannot point clearly to the bridge that carries them. "Between the highest development of a mind and its first dim awakening . . . there is no point at which we can say, here a new quality appears entirely unconnected with anything that has gone before."[1]

We certainly meet with cases of people who surprise us by contradicting themselves in matters in which in a general sense they are well versed. This would go to support the main contention of the present chapter, and to show that thoughts and feelings have no permanence of their own. It points to the danger of having more ideas than we can carry; "carrying" in this connection imply-

attitude at the point at which consciousness broke off, or (*b*) there has been a sub-conscious sustenance of the activity. The latter seems likely, inasmuch as the things of overnight often have a fresh aspect in the morning; there seems to have been a setting aside of the irrelevant, and an awakening to clearness which make it a wise precaution, *e.g.*, at times of sustained study, to sleep with pencil and paper under the pillow in order to catch the waking thoughts. A "make and break" theory would be hard to establish, moreover, in view of the fact already considered in some fulness that mind and body continually co-operate, and that, whatever the sleep-processes really are, physiologically we do not come to a standstill; (8) At present, certainly, it must be set down as sheer speculation. But there are experiences which go to suggest that in sleep we may at times fall back upon some deeper self, and allow freedom to that current of which Matthew Arnold writes with such appealing insight in his poem, "The Buried Life." It may thus not be altogether fanciful to speak of sleep as a "passage into another phase—the regenerative phase—of personality." (On this last point see James, "Principles of Psychology," vol. ii. p. 294, and the same writer's "Types of Religious Experience.")

[1] Mellone and Drummond, "Elements of Psychology," p. 24.

Value of hand work

ing "carrying out" into some sort of action. The real thread of continuity in the mental life is activity. Hence, an idea which its possessor either forgets having had, or which is crowded out by the rush of other ideas before it is acted upon, makes for mental discontinuity of the kind described. "An idea," as Ribot well says, "which is only an idea, a simple fact of knowledge, produces nothing and does nothing; it only acts if it is *felt*, if it is accompanied by an affective state, if it awakes tendencies, that is so say, motor elements."

From the educational point of view, one thing is clear, namely, that the mere receiving by the child of a number of impressions is not synonymous with the building up of personality. In the first place, it is an essential of a right education, that the hand should have its chance within school hours of definite educative occupation, taking the lead for the while and bringing the child away from the din of words into wholesome active contact with things. But a real education will do far more than this. It will invest all school studies with purposiveness and even with some amount of practical urgency. The child is not merely learning to live. He is learning by living. He is not so much learning to behave, as learning by behaving. His learning is part of his sum-total of behaving. The poet, Browning, has put into two lines in one of his poems the foundation-principle of the teacher's attitude, the scholar's attitude, and their implied co-operation:—

> "To be by him themselves made act,
> Not watch Sordello acting each of them."

There is no truer principle ot method than this. Why should we teach the *history* of Brutus and of the Gracchi, the political struggles in ancient Rome, the character of Socrates as patriot, soldier, and sage, the Olympian contests, the endurances of Spartan braves, save to quicken the pulse of

individuality and to awaken the instincts of achievement? Why study *language*, except that we may arrive through it at man's meanings; study his expression of them; acquire the art of expressing ourselves? Why teach *geography*, if not because it is in the main the story of the interplay of natural environment and human industry? It appeals to the child's practical instincts in that it pictures the hand and the mind of man as forces turning nature's bounty to use and overcoming her oppositions.

Again, is not the study of *science* essentially the study of our environment, of life and force, and of the conditions which make the earth a home for man as well as for countless other living things, both plants and animals? It is a study of our environment in terms of forces and phenomena; of nature's manifold interactions; and of uses. "The life, the fortune, and the happiness of every one of us," as Huxley says, "depend upon our knowing something of the rules of a game infinitely more difficult and complicated than chess. The chess-board is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of Nature. . . . Education is learning the rules of this mighty game."

Arithmetic, again, is a very different subject when taught from the standpoint of its uses and with a prevailingly practical reference. A boy has been known to turn with fresh zest to his mathematics and to succeed where previously he had far more nearly failed when he found that he could apply it in his engineering.

These are casual examples of the great truth that behaviour, the activity of the self, is at once the clue to method in education and education's supreme aim.[1]

[1] Professor Judd, of Yale, in his "Psychology: General Introduction," gives illustrations to show that "activity does not always mean movement," *i.e.*, movement of an outward or visible

Details of educational method are not in place here. Spirit is more than methods, and right aims are not long in giving rise to suitable devices. It is the bare truth to say that all that has been hinted at above is actually being done in one school or another. School-routine becomes year by year less artificial; more all-round in its reference, more complete in its response to the needs and nature of youth and childhood. Much as yet remains to be done, much is already actually being done to turn the edge of Bernard Shaw's epigram, "My education was interrupted by my schooling." The English-speaking world owes a great debt to the keenness with which American educational leaders have tackled the real problem. To name but a few of these. Since Horace Mann, there have been Francis Parker, W. T. Harris, Stanley Hall, Mark Baldwin, John Dewey, N. M. Butler, with a host of State and city superintendents and individual teachers; and in Canada, J. L. Hughes, and others. Even though the pendulum may in places—for a time, indeed, almost universally—have swung out rather far in the direction of a "new" education, the net result is well expressed in the words of an English writer: "We are rapidly coming to realise that it is action towards an end to which the child himself is a conscious party that is educative." Not that the child is, or ought to be, conscious of the whole of the teacher's aim. The child busies himself about an immediate end. The teacher so devises and co-ordinates these immediate ends that they shall be subservient to the aim and purpose of school life as a whole. The difference to the child or youth is real enough between the bare "going-through-the-mill" idea, the doing everything because teachers and school prescribe it, and a school experience in which he freely and con-

kind. Pages 183–4. He works out with some fulness the more fundamental aspects of the relations that exist between experience and expression.

sciously lives out a large part of his own life. Arnold, of Rugby, had this great way of occupying the thought and will of the scholar in immediate ends with an ulterior end in view. The influence of a right education upon the developing personality of the child or youth is both immediate and permanent. It satisfies an immediate end; and it goes to the making of powers of "head, heart, hand" which shall be the best asset of his later life.

The main outcome of this chapter has been to emphasise behaviour or activity as the true basis of personal continuity. "The will is the man, psychologically speaking." Sustained and systematised behaviour is the spinal centre of personality. This is in perfect harmony with the conception from which we started of an original nucleus of tendencies, manifesting themselves in part (under the sway of a long evolutionary history and selective adjustment) as instinctive tendencies. It agrees well with the fact we have noted that man's onward progress is through a blending of instinctive tendency with experience, whereby tendency or behaviour remains as an essential condition. It agrees with the view of man as a psycho-physical organism; and with the reconcilement of permanence and change in the idea of growth. It fits in, too, with the phrase which probably better than any other sums up the results, and suggests the pedagogical applications, of Child-Study, namely, that the child is essentially a "behaving organism."

SUGGESTIONS AND ILLUSTRATIONS.

1. "Not the entirely new, not the perfectly familiar, but both in combination are essential. The old in a new setting, or the new in an old setting is the arrangement that ensures interest" (Adams).

2. "The first thing the teacher has to do in seeking to rouse interest in a new idea is to *prepare a place* for that idea. By talking to the pupil, or by showing him pictures" (or, of

Empirical knowledge

course, by getting him to talk to us), "we must call up in his mind . . . ideas he has previously acquired that are likely to come into relationship with the new ideas we wish to introduce. There is no greater charm for any one than to find that a certain fact known in one connection suddenly comes to be of use in an entirely new way. To maintain interest, each new lesson should be impressed upon the background formed by all that has gone before" (Adams). The girl who said that she would as willingly believe people who told her that coal was once cheese as that it was once forest was logical enough. She had no more data to work from in the one case than in the other.

3. "Unless the pupil does his share of the work, nothing can really interest him. . . . Thackeray tells us that one way of being dull is to say all that can be said on any given subject" (Ib.).

4. There is, over and above association and assimilation and the apperceptive activity described in the first of the above suggestions, the vital energy which associates, assimilates, and apperceives. The continuity is not in the processes, but in the *mental life* which makes the processes possible.

5. "Apart from action the thought of self is unimportant" (Dewey).

6. The whole study of arrested development comes in as a corollary from the general fact of mental continuity. Miss Dorothea Beale, in a paper read before the Child-Study Society at Cheltenham (published in *The School World* for January, 1899) brought this out with great clearness. The normal child should "grow up," taking in from his environment "food for body, mind, and soul—gradually, constantly developing, with no breach of continuity, ever higher forms of life. The process of development must be continuous and the instruction adapted to age and capacity. . . . First the child learns empirically. How wonderful is the power

ways of arresting development of child

of acquisition of the little child! See the multitude of objects that he comes to recognise during the first three years of life. But this empirical knowledge is not lasting, unless it is taken up into the thought-world. . . . It is a great mistake, therefore, to teach elder children as one would teach an infant. The so-called methods which keep the learner at the childish stage instead of leading him on, or which teach the adult as if he were an infant, may seem to be successful, but they are not so in the long run." (Miss Beale illustrated by reference to language-methods; but the principle applies universally. See, also, in this connection, Mr. Keatinge's criticism of the school methods of Comenius in his edition of the "Great Didactic," pp. 149–50.)

"There are three principal ways in which we may arrest development. (1) We may give to the young child the teaching for which it is not ready, which it cannot assimilate; try to make it conceive and reason, when its perceptive powers and imagination should be in the ascendant. We all know how inconveniently active is the observing faculty in young children, how 'meddlesome and mischievous' they are considered by ignorant people. It is the want of a knowledge of mental science which leads so many to press upon the teachers of infants that they should give instruction inappropriate to their stage of development. (2) On the other hand, we may feed on a poor and insufficiently stimulating diet those who need not milk but meat; by giving food ready prepared we may arrest the development of the digestive power. Work should be difficult enough to call forth the powers." (3) Arrested development may occur, as Miss Beale shows, by the attempt to assimilate too much new food at once. This is the one most marked defect in the American High School (somewhat comparable to our Municipal Secondary Schools and County Intermediate Schools, but entered at fourteen, at the close of the Primary School period). The assault upon too many fresh subjects

leads to nervous damage and to arrest of mental growth. "One hears of a child beginning three languages at once," says Miss Beale, evidently quoting from English experience, and continues: "And I venture to think that the amount of reading prescribed by our Universities is sometimes a real hindrance. If a student is compelled, in order to finish his set books, to read some hundreds of pages daily, he may get into the habit of merely acquiring instead of digesting; accepting instead of questioning and reflecting; receiving instead of forming opinions. . . . As there may be arrest of development by feeding with improper food, so there may be through an exclusive mental dietary. Dogs have been starved on an exclusive dietary of white bread. I have seen unhappy tadpoles, who could never grow legs—they had not the complete dietary needed for the development of the frog—and I have known some girls and boys whose mental and moral life was atrophied through the same cause. We have all heard of Darwin's lament over his loss of power to care for music and poetry. With girls the one subject is apt to be music; the young girl is required to practise an excessive number of hours, or sent abroad away from all the home influences which should build up her character, with the result that she can never become the best type even of musician." Miss Beale commends Mr. Barnett's remarks in "Work and Play in Girls' Schools" to her readers.

7. "Child-study will perhaps find its most profitable field of investigation in this matter of arrested development. If it can tell the teacher how far to push thoroughness to the borders of mechanical perfection, and where to stop just before induration and arrest set in, it will reform all our methods of teaching" (Dr. W. T. Harris in a valuable paper published in the American journal *Education*, on "The Study of Arrested Development in Children as produced by injudicious School Methods").

8. Mr. Bompas Smith, in his book on "Boys and their Management in School," has three very helpful chapters on boys at the ages of 8 to 13, 13 to 16, and 16 to 19, respectively.

9. There is, of course, a large literature on the general subject of this chapter. On the Ethical and practical side there are such works as the following: MacCunn's "Making of Character"; Mackenzie's "Manual of Ethics"; Muirhead's "Elements of Ethics"; James's "The Will to Believe"; Bosanquet's "Psychology of the Moral Self." From the standpoint of the applications of logic and psychology to educational theory, reference should be made to Findlay's "Principles of Class Teaching"; Welton's "Logical Bases of Education"; Adams's "Herbartian Psychology"; Barnett's "Common Sense in Education"; James's "Talks to Teachers on Psychology."

1) The scholar persists
2) " cares
3) " possesses certain capacity of self-determination

CHAPTER VIII

THE MENTAL PROCESS: (*c*) SELF-DETERMINATION

Two of the postulates with which the educator takes up his task were referred to at the commencement of the last chapter. They were that the scholar persists, and that he cares. A third characteristic, equally presupposed in the educational process, is that the scholar is possessed of a certain capacity of self-determination. A machine cannot be educated; a child can. As Huxley said, whilst expressing his entire willingness to be an automatic machine—his preference, indeed, if so he might be wholly right and good in place of being imperfect as a man—if man is a machine, he is a machine that is "capable of adjusting itself within certain limits."

Individuality of any kind, the individuality of a stone, a leaf, an animal, a man, implies a certain power to hold one's own. And the general tendency of all organic activity is to enable the organism to maintain itself, and if need arises to set it free from hampering conditions.[1] "A plant is self-determined in so far as it can tolerate nothing alien to its organic nature." The mind is at least possessed of power similar to this. It excludes what is alien to itself. "The self resists invasion."

But the consciousness we are seeking to account for is

[1] See on this and related points, Lloyd Morgan's "Introduction to Comparative Psychology," p. 344. See also Boyce Gibson, "Philosophical Introduction to Ethics," pp. 141–2.

really a consciousness of being "*free in a sense in which Nature is not.*" The proposition, to the working out of which the remainder of this chapter will be given, may be stated in Green's words: "It is not necessary to moral freedom that, on the part of the person to whom it belongs, there should be an indeterminate possibility of becoming and doing anything and everything. A man's possibilities of doing and becoming at any moment of his life are as thoroughly conditioned as those of an animal or a plant; but the conditions are different. The conditions that determine what a plant or animal or any natural agent shall do or become, are not objects that it presents to itself. On the other hand, whatever conditions the man's possibilities does so through his self-consciousness. . . . An action which expresses character has no *must*, in the physical sense, about it. The 'can't help it' has no application to it. A character is only formed through a man's conscious presentation to himself of objects as his good, as that in which his self-satisfaction is to be found." Determinism would say, on the contrary, either that a man's actions are determined independently of his own consciousness, that is, wholly by heredity and environment and the opportunity which he owes to each, or else that his own consciousness, his psychical individuality, is determined by these, in such a way that he cannot act otherwise than he does. In either case man would be nothing more than a conscious automaton. And there seems to be only one way of escape from this. If in a given instance I do act without hesitation and seemingly on the spur of an idea, I can only claim freedom in any complete sense, if I can assure myself that I had, then or before, selected the idea, or, which is almost the same thing, selected a type of behaviour, a "universe of desire," with which the idea accords. As Green says: "Since it is not the hunger as a natural force, but his own conception of himself, as

finding for the time his greatest good in the satisfaction of hunger, that determines the act, Esau recognises himself as the author of the act."[1] It is thus upon the possession of the power to select the ideas which are to rule our conduct that the question of self-determination turns.

Self-determination, as the phrase itself suggests, may mean either determination *of* the self, and imply an alternativity of being, or determination *by* the self, and imply an alternativity of doing. The self may be either the object or the agent of the determining activity. The two will be seen to be essentially related, however.

As to alternativity of doing, an activity is often selected or decided upon without any reference on our part to the kind of character we are forming. We can think of action as determined by ourselves, without *directly* thinking of ourselves as self-determined. This is the case when we speak of "freedom of action" and mean that a selection is made by the will or the self in the presence of circumstances. If immediately presented circumstances do not by their own weight determine my actions, but I have power of choice—so far independent as not to be dominated by immediately impelling motives—I am so far, and in that sense, free. This is clearly the prior question. For if this freedom does not exist, it will be impossible to find grounds for asserting any real alternativity between two kinds of self, *i.e.*, any power of decision to be one kind of self rather than another. The two things may with advantage be considered separately: (*a*) the power to decide between courses of action, and (*b*) the power to decide between two kinds of self; determination of behaviour *by* the self, and determination *of* the self.

(*a*) The first question is as to whether there is any real alternativity in human conduct; whether, that is, though

[1] Green, "Prolegomena to Ethics," p. 100. The preceding quotation is from pp. 110 and 111.

we act in a certain way, we can act or could have acted otherwise. There are those who say that the idea that we could have chosen otherwise is pure illusion. And, of course, there does come a point at which the scale turns decisively, a point at which, if the expression is not a question-begging one, we *voluntarily* cease to be able to hesitate. This is what we mean by volition, and apart from it we should, as a race, suffer from the direst *aboulia*. At that point it is true to say we cannot choose (if we are to remain rational, purposive beings) other than we do. When we *do* choose, we choose; we cannot both choose and not choose. To say that at that moment choice might be otherwise is practically to deny the fact of choice altogether. So much may be rightly meant by saying that the idea that we could have chosen otherwise than we did is an illusion. But if this is the meaning of not being able to choose otherwise than we do, are we not suffering from the treachery of language? The words, "could have chosen," are so indefinite in their time-reference that they may refer either to the moment of actual choice, at which moment the matter was up for decision in its final phase—and *then* we could not, if choice is to be anything at all, have chosen otherwise than as we did; or they may refer to the time taken up in the process of choosing. The latter is the crucial period. If within it there is real deliberation, there may be real alternativity; and we shall then be able to assert a real freedom of choice by the self in the presence of circumstances, motives, or whatever else it be that passes before it during this period of deliberating.

As already said, the question turns upon our being or not being compelled to act upon a temporary dominating idea or tendency that has arisen in consciousness. Given such an idea or even temporarily dominating tendency, are we obliged to let it have its course? Or has the mind

a directive power in respect of its ideas and tendencies even though they may be strongly charged with feeling and motive force? To take a simple case. Some purely instinctive response, say, has led me into trouble. The fire attracted, but it burnt. Now it again attracts; and memory warns me that if the instinctive prompting is followed it may (doubtless will) again burn. The instinctive prompting is not followed. But how comes it to be arrested? What has fallen athwart the immediacy and uniformity of the response which characterises instinctive reactions? To this there is only one answer, namely, that our organism (physical and psychical) is such that arrest of response plays as essential a part in all not involuntary reactions as does the necessity of response itself. The burnt child dreads the fire; the burnt moth does not seem to do so. It is specially important to note the effects which are due to the presence in man of the higher brain. Certain of these effects, which experiment in the psychological laboratory proves to exist, might almost have been anticipated. The reaction-times—that is, the periods that elapse between the incidence of the stimulus and the registering of the response—are less when the current travels only through the lowest level with the spinal cord as centre, than when it passes through the brain. Also (and this would not have been so readily anticipated) experiments with animals whose brains have been removed show, when the reaction-times are compared with those of animals having their brains intact, that the very presence of the brain increases the reaction-time. That is to say, as Professor Hyslop points out,[1] when a brain is present the *normal condition* is one of psychological inhibition. The brain itself, in addition to being the organ of consciousness and of the higher circuiting of responses, is thus, indirectly, an organ of inhibition or of the arrest of responses. This

[1] *Mind*, N. S., vol. 3.

has a direct bearing upon the question we are considering. *Inhibition is structurally provided for.* This time-interval is, of course, very slight. But the flashing-in of ideas is swift. The great thing is to have a noticeable pause at all. Supposing, for example, that some instinctive reaction has, in the form that was originally given to it, to be unlearnt, the effect of inhibition is to make a break in the previously direct connection between stimulus and response. In this way an opening is made for ideas. These ideas are entertained with a view to acting in harmony with the lessons of past experience. Hence through the inhibition the necessary pause has been given for deliberation to set in; and in deliberation we have all that is essential to real alternativity. For the power to deliberate is the power *not* to act upon the spur of each occasion, but to refrain until the will has expressed itself in terms of either the habitual or the rational self. In that case it is not circumstance, but our attained personality or character, that determines us in our choice.

The point at issue has, of course, to be carefully stated if we would not find ourselves on the horns of a dilemma. To state the contrasting views baldly in the form: Do we control circumstances, or do circumstances control us? is to invite the experience of being pitched from horn to horn, reaching no result. Man is not pitted against circumstances as a cannon-ball is against a sheet of iron, to see whether it will go through or not. The cannon-ball cannot accommodate itself to the sheet of iron and say: "Well, I'm in no hurry; I'll do a bit to-day and a bit to-morrow." An animal baffled in its assault upon some obstacle does not seem consciously to leave over the remainder of his assault to some future occasion or occasions. Each assault is finished with there and then. The same situation may provoke further assaults, which may in the accumulation of their effects prove successful; but that is a different matter.

But when a man is confronted by baffling conditions, he may go away to consider. He "will let you know." That is to say, the matter is not finished with on the spot.

This part of the answer to the problem may be summed up in three statements, which are so mutually involved as to be little more than different ways of saying the same thing. (1) We are not obliged to act because of the presence of a given circumstance or motive. George Fox needed the wherewithal of livelihood; but, as Carlyle notes with much gusto, he found a way of escaping from his shoe-making. Or, to illustrate from another field, complaint has at times been made, in connection with some great criminal case, that too much has been made of the motive. Such a complaint would be well grounded if the existence of a motive were accepted as a proof of guilt. If the existence of motives necessarily made people guilty, it would create considerable heart-searching with regard to our codes of punishment. But we do not regard the criminal as motive-driven, willy-nilly. The willing to perform a certain act, in this case a crime, we recognise as being something more than having a motive to perform it; it is endorsing a motive. As Green says, the motive which is necessarily involved in a matter of will is not merely due to the desires or aversions supposed to be present in the agent's mind. "It is constituted by the reaction of the man's self upon these, and its [his] identification of itself [himself] with one of them." Defining motive as the feeling which prompts to act in a certain way, a motive may or may not be acted upon. Indeed, opposing motives are often simultaneously before the mind, some pointing towards one way of acting, the others to its opposite. But it is contrary to the very nature of the mind to hold consciously before it mutually contradictory *intentions*. We cannot will to do two things, the one directly contradictory of the other. And the essence

of deliberation is to enable us to bring all available motives into the balance before the scale bumps decisively; more especially to enable us to give weight to motives affecting the wider life of the self as against the weight of some on-setting motive or desire. (2) Not only are we able to say "No!" to any single strong motive, but when many motives are present, and even when there is a strong leaning in one direction, we can hold them all at arm's length; we can suspend our choice by deciding as we say, "to sleep on it." The man of overnight in such a case deliberately hands over the decision, or at any rate the further consideration of the matter, to the man of the next-day morning. (3) We are able, through the active quest for guiding ideas that goes on during the interval of deliberation, to whip up laggard or temporarily absent motives. This is only a more positive way of saying what has already been said under the first heading. The process of quest is something like the familiar experience of trying to remember, when by calling up one cue after another we at last hit upon the fact, the name, or the figure that had "escaped our memory." We can give the mind a chance (through the revivability of ideas) to call up motives that at the moment are off the field. In virtue of this power we are able to act upon ideas *previously* selected, resolves *previously* made. Immediately presented impulses are inhibited in order to give past determinations an opportunity to assert themselves. This is always part of what we mean by strength of will.

What the three statements of the preceding paragraph practically amount to is that a desire or an aversion has not in itself a definitely assignable energy of motivation comparable, say, to the energy of a mechanical force. The energy it has depends largely upon the direction of our attention towards it or away from it, upon the extent to which we give ourselves up to it.

Throughout, the key to the situation is the power of

inhibition or arrest; and following upon this the selective or directive power of attention.[1] We have seen that it is of the nature of the mental life to have direction. It is also of the nature of that which has direction to pass by what does not lie in its route. Deliberation is the deciding as to which is to be our route. We may have to deliberate at times for want of clear knowledge as to which way alternatively presented paths may lead; just as a pedestrian may have to do when he comes to a fork in the road. At other times, we have to deliberate as to which direction corresponds with our own conception of ourselves and which in the light of this conception for that occasion offers us the greatest good. The outcome of it all is that deliberation gives the self a full chance in the face of motive or circumstance. The choice is capable of being made in terms of the self and not in terms of the circumstance. True, the ultimate action or decision follows the line of the ideas to which is ultimately conceded the greatest impelling force. This is the truism which underlies the statement "a man cannot choose other than he does," when the reference is to the precise moment of decision. But the really important matter is as to whence the idea which acts as motive derives its force. Is it inherent in what during perhaps the greater part of the process of deliberating was the uppermost desire? Or is it inherent in the entire self —that is to say, in the wider range of consciousness and experience of which the deliberative capacity puts the self in command? If the latter, we have all that we need in order

[1] For a description of attention on these lines reference may be made to Dr. Ward's article "Psychology," "Encyc. Brit.," vol. ix., and to James's "Principles of Psychology," vol. ii. pp. 573–8. Skilful trainers of young children (and of older children too in a more complex degree) know how much of the power they have to control their behaviour depends upon the directing or the diverting of attention.

to be able to assert that the deciding between motives or in the presence of circumstances vests in the self. This final going of the self with its own volition probably accounts for the somewhat striking fact noted by Stout, that "in forming a resolution I may have great difficulty in making up my mind, because the pros and cons appear equally balanced. But when the resolution is once made, it may be in a high degree firm and stable. . . . The self of self-consciousness receives in deliberation and voluntary decision a unique qualification. It is only in these processes that we become aware of ourselves as free agents."[1]

So far the argument has turned mainly upon what introspection yields us in respect of our consciousness of alternativity. But in connection with the determination of conduct by the self we may note by external observation that our action is a "real factor in the course of events." When we find our ideas realising themselves, so that reality, in however small a degree, shapes itself according to our purposes, we are justified in thinking ourselves to be something more than mere spectators of Nature. We are so far factors in the course of events that "our own reactions on the world, small as they are in bulk, are integral parts of the whole thing."[2]

(*b*) We have already trenched somewhat upon the second and more direct meaning of self-determination, as the deter-

[1] "Groundwork of Psychology," pp. 234–7.

[2] James, "The Will to Believe," p. 60. Green distinguishes the "world of practice" from nature or the world of experience in this respect. "Whereas in perceptive experience the sensible object carries its reality with it—in being presented at all, it is presented as real, though the nature of its reality may remain to be discovered—in practice the wanted object is one to which real existence has yet to be given. . . . It depends on a certain exercise of our powers, determined by ideas of the objects as wanted, whether those ideas shall become real or no" ("Prolegomena," p. 92).

mination *of* the self, *i.e.*, of our own personality and character by our choices and responses.

As before, we have to decide between the two opposing views. According to one view, our selfhood, equally that of the most cold-blooded murderer and that of the highest-minded hero or saint, is absolutely pre-determined. In the other view, we consider selfhood as actually in the making. A certain pre-determination must be allowed, of course. If the self of the past (including factors due to the past of the race, as well as to individual experience) counted for nothing in connection with the choices and actions of the self of the present, no meaning could be given to the progressive making or up-building of selfhood. The "I am" of Descartes's formula means, at its minimum, a living entity which is in part conserved and in part progresses. "Am," that is to say, is not merely an infinitely narrow dividing line between past and future; it is a link of connection between them. And one all-important function of volition is to be the guardian of our personal identity; to maintain the personality already realised, in the midst of changing circumstances and varying appeal. Man's freedom so far resembles that of the forming crystal or of the chemical process that the present development absolutely presupposes the past. It differs from that of crystal or chemical element acting out inherent law in the presence of the right conditions, in that man realises the situation and, gradually acquiring insight into his own nature, forms an idea of himself. Man sees something of the plan of his own life and being. He forms such guiding concepts as "man," "human," "rational," "freedom," "duty," "self," "good," "end." Through them he arrives at a working conception of himself—far enough removed from finality though it may be—which deepens into the power to cherish ideals.

In order to be able to assert that we have a hand in the shaping of our own selfhood, practically all that need be

added to the argument for alternativity between courses of conduct is a belief in the reality of moral distinctions. It is often argued that inasmuch as a man does not "make himself"—implying that God or circumstances (heredity and environment) have done all for him—man is not responsible either for what he is or for what he does. "It is not," we are sometimes told, "a question of what man *is*, but of whether or not he is responsible for being what he is." But the whole value and relevancy of such a statement surely depends upon the prior question of what man is. Is he rightly regarded as a moral being? If so, in what sense? For whether or not he is responsible is part of the question of what he is as a moral being. Upon this the whole of this portion of the discussion really turns. What *is* man's nature? Is self-determination a part of it. Man, say some, did not make his own nature. And, if man did not create himself he cannot be justly blamed for his acts. Nor is it right to whip a hooligan who never had a chance to be anything but a hooligan.

"If a machine does not make itself, it is not answerable for its faults.

"If a tree does not make itself, it is not answerable for its faults.

"If a dog does not make itself, it is not answerable for its faults.

"But if a man does not make himself he *is* answerable for his faults."

But, may we not reply, even if man did not make his own nature, that begs no question as to what really is his nature? It does not prove that he is not free, because he *may have been made* free; and he himself, who should be the best judge, thinks he was made free. His instinctive view of himself is that he is not merely a "passenger," but a "helmsman," capable of navigating the vessel, of doing something towards determining its destination.

In the course of a recent discussion Sir Oliver Lodge restated the determinist argument, which he was opposing, in its most favourable and logical form:

(1) "It is just to punish men only for what they have really and freely done.

(2) "Man is not a free agent, being the outcome of external forces.

(3) "Therefore man ought not to be punished."

There is nothing amiss with this argument if the premises are granted. It hinges upon the second premise; and the question raised in it practically is as to whether man is or is not in any real sense a moral being.

The answer we have divided into two parts: first, that man has a real alternativity in the presence of motives or external circumstances; and, secondly, that he feels that he has a hand in the making of himself. These necessarily overlap. In providing for the punishment of the hooligan, we are, it may be, mainly concerned with setting up alternatives of behaviour before him. But even in so doing we are taking it for granted that he is not so irretrievably "made" as to be incapable of being anything but a hooligan. We at least hope that we are setting up a character-alternative, as well as a conduct-alternative. "In punishment," as Hegel says, "the offender is honoured as a rational being," that is, as a being capable of seeing and choosing a better way. The latent power of the hooligan to be something better was put to the test successfully by a Manchester curate some years ago. Out of sheer ruffianism and without warning or provocation, a youth attending a Lads' Club stabbed him in the arm. When the cry of "Police!" was raised, the curate said, "No, no police!" but stripped his arm up to where the gash had been made, and calling to the culprit, bade him come and bind it up with his handkerchief. The fellow did so: and after that there was one man's presence at least in which the hooligan was tamed; proof thus being

given that the ruffianly fellow had some power of self-determination away from hooliganism. Reasons for acting in a different fashion may become grounds for making a different kind of character. And, *vice versâ*, the end we have in view with regard to our own character may, and often does, determine our behaviour. It was what he *willed to be* which led George Fox to the notable decision which Carlyle calls "perhaps the most remarkable incident in modern history."

The truth seems to be that freedom, like character itself, is a question of degree. Character is always in the making, never made; is always being expressed, never finally expressed. Every fresh experience brings in its contribution. Every act of will is, in its own measure, a fresh determination of character. Similarly, we are more or less free in proportion as we attain to a more or less completely developed selfhood or personality. Absolute freedom, like absolute goodness or efficiency or strength, belongs only to perfected selfhood. But even in this sense we are free to become free. If we drift into incoherence and disunity, we prove ourselves free to become unfree. This is the alternativity which underlies the power of self-determination in the sense of the determining of ourselves.

The experience of remorse is a spontaneous assertion of our belief in this moral alternativity. Is this illusion too? Or have we really failed to attain to a selfhood that was within our reach? It would, indeed, be a strange and unaccountable provision, either on the part of evolutionary process or special creative agency, to furnish man so universally with an illusory conviction capable of yielding the most poignant grief. Remorse is the common consciousness of the race. It is the spontaneous acceptance of responsibility for our own deeds. If it is the self that is, crying out for the self that might have been; or some deeper self regretting the failure to attain, and chafing sadly at the altogether lesser thing which an ill-omened choice

has brought ; then, remorse is real, even salutary. It may tend to make us preface future self-determination with better consideration.

One of the weightiest arguments in favour of the illusory nature of remorse, the essential sting of which is the belief that we might have acted otherwise than we did, is that when we so think we are really forgetting what our character was when we acted. "It is no use thinking—not even true to think—that we could have done better," the argument runs. "We couldn't, being the people we were." Certainly, it must be admitted that every act is in some way a showing of the self. Conduct, good or bad, is the only real proof of the kind of man the agent is, of the kind of character he has. Indeed, remorse gathers part of its intensity from this. It is not only the action, but the character which it bodies forth, that we would be glad to repudiate if we could. But the deed there, we cannot. Remorse is in part our realisation of the truth that "a thing *is* just what it *does*." That which cometh out of the man defileth the man. Conduct is symptomatic of character. All this is true ; but it does not deny the fact that there might have been an arrest of the act ; that better counsels might have prevailed. They did not, and evidently, in this one direction at least, our character is not effectually made. The act which causes us remorse proves the existence of a weak spot. But, whilst this is so, the very energy of remorse, its intense, almost instinctive, striving to repudiate what memory relentlessly affirms, shows that we will not think of it as a hopelessly weak spot—nor as a spot that was hopelessly weak, even as compared with the pressure of motives upon it, at the time of our acting. Moreover, remorse may change to penitence, which involves the affirming of the power to seek, and the actual seeking of, a better way. If anything could prove the non-illusory character of the mood of self-conviction, it is surely this.

The making of character may at any moment take either of two courses. (1) It may be an affirming of the habitual self; a maintaining of its claims against a clamorous, but in the view of the habitual self an irrational, appeal on the part of present desire. It may, that is, give a pause which shall prevent our having to say later: "I was not myself (*i.e.*, my habitual self) when I did that." (2) The making of character may take place through our giving expression to the self-adjusting or progressive self; adapting ourselves to some new environment, or moving forward in the line of our ideals. And if I did neither of these things, if I affirmed neither my habitual self nor my progressive or ideal self at some moment upon which I now look back with remorse, it was not, this voice keeps saying, because I could not have done them. The real sting of moral weakness is the consciousness of the possibility of being stronger. I do not necessarily in remorse forget what my character was when I acted. I rather regret what it was, accompanying my regret with the conviction that it needed but a little more effort, a little more restraint, or a slightly more definite fixing of attention upon an alternative course, for the whole thing to have been different. Conscience is a taskmaster; but not a bully. It takes the measure of our powers. And where there was no appeal to conscience, there is no remorse.

There are only the two directions in which to look. We may take the report of man's consciousness; and we may appeal to facts. As to the latter, our social life is built up on the assumption of individual responsibility; and the theory fits the facts, so far as we see them. As to the former, if any one can look in upon *his own* consciousness and say that he finds no sign there of being responsible for himself, it is a fact for the psychologist and the philosopher to take into account. But it is beside the mark to make the same assertion about any one else, even though he be the "bottom dog" of society. What we find is that, however

a man's sympathies may lead him to exonerate the "bottom dogs" of society from blame, he accepts for himself the responsibility of being the author of his own actions. We cannot disclaim this responsibility without practically denying the reality of moral distinctions and with them the validity of the richest of our intuitions of personal existence. For it is, as we have seen, in choosing or willing that we attain to our fullest sense of *being*. The essential self is the self-determining self. "To be a self at all, as the Greeks clearly saw—to be rational, as they put it—is to have an end, and to develop towards it."

True, there are limitations to our power of self-determination which have to be reckoned with. This is implied in the possession of a finite personality or character, on the one hand, and in our living in an environment, on the other. All that the brief re-discussion of this perennial problem has aimed at has been to show that there are senses in which the power of self-determination may be regarded as a real possession of the self.

So far as limitations arising from our environment go, it needs to be remembered that we are in no small degree makers of our own environment. For, in the first place, both outward environment and actual events are largely coloured by the minds and characters of those to whose lot they fall. We control events in no small degree by the meaning we assign to them. "It is true," says Maeterlinck, "that on certain external events our influence is of the feeblest, but we have all-powerful action on that which these events shall become in ourselves. . . . Nothing befalls us that is not of the nature of ourselves." The crowning grace of human personality is in this power to invest the conditions of life with meanings emanating from ourselves. And, in the second place, actual environments and events themselves change appreciably as our outlook upon life and our behaviour in life changes.

As to limitations that arise from the side of the self, the obvious suggestion—and one that is worthy to rank amongst the few fundamental principles of education—is that in order to minimise these limitations the individual needs practice in the use of his character. Only in this way can a character attain to and maintain determinateness of direction and strength of flow. It may weaken for want of exercise. And no small part of a right education consists in providing opportunities for the development and expression of personality. Here, again, activity or behaviour is seen to be the connecting thread which establishes continuity within the life of the self. In a suggestive address entitled "Hand and Heart," Dr. Martineau reverses the moralist's principle that a good heart is to be valued because it produces serviceable deeds, and speaks of good deeds as at once the expression and the nourishment of "that greatest of possessions, a good mind." It is surprising, he adds, how practical duty enriches the fancy and the heart, and how action clears and deepens the affections. Beneficence is the true school of benevolence.

The twofold aspect of strength of character just suggested —determinateness of direction and force of flow—brings us back to the terms in which, quoting Green, the problem was stated at the outset. It has not been a question of not being determined, but of the determining conditions being different from those which obtain in nature. We are free "in a sense in which Nature is not," not because our conduct is undetermined; but because it is self-determined. This includes all that is implied in biological freedom, and adds to it the fact of choice.

SUGGESTIONS AND ILLUSTRATIONS.

1. There is general agreement that in willing or choosing we attain in a special degree to the consciousness of personality. We might even without violence amplify

Descartes's formula, and say: *Excogito, ergo sum*—I think things out or think to an issue, and, in so doing, I am. In this form we have more fully expressed than in the original our consciousness of personal partaking. (For the psychological significance of *excogitare*, cf. the two first references in Lewis and Short's Latin Dictionary: "quod enim mali aut sceleris fingi aut excogitari potest, quod non ille conceperit? Cic. Cat. 2, 4, 7; ad haec igitur cogita, mi Attice, vel potius excogita, id. Att. 9, 6, 7.")

2. Habit, to have a moral significance, begins with choice.

3. There is a continuously binding effect of decisions once made. The choice of principles of behaviour has a marked effect upon future conduct, and probably can only be neutralised by a more or less deliberate choice of opposing principles. "Volition in its highest and most complex form affects not so much single acts as courses of conduct."

Professor Taylor says: "The more abiding and logically coherent my various purposes in action, the freer I am, because it is my *whole* self or system of rationally connected interests which is getting expression in my outward deeds" ("Elements of Metaphysics," p. 336). When, for example, a schoolmaster gives a boy who is leaving school a testimonial to his employer, he does so because of what he knows of the boy himself. A certain system of interests and purposes has been set up which determine the behaviour and character of the boy. The more coherent this system is, the surer the master is of its stability and the more confidently does he speak of the boy's character—*i.e.*, the more confidently does he forecast his behaviour as likely to be of a certain type expressive of this character.

4. Mazzini writes: "We are not free, but free to become free." Our personality, that is to say, develops. Coherency or unification, on the one hand, enlargement and enrichment, on the other, are the marks of a progressive freedom.

5. If our conduct is in any degree a real factor in the course of events, there is obviously some degree of alternativity in the course of events. Any one who believes that there are things which he or others ought to have done which were not done, that there are things which might have been but are not, things which ought to be done which yet may fail to be done—any one who really believes this, believes that things are not absolutely fore-ordained to happen in one and only one way. He holds that we really can and do play some part in the shaping of circumstances. To illustrate this elasticity of the universe in the presence of the individual will, James uses the analogy of an expert playing chess with a novice. The analogy serves to illustrate the alternativity which, without endangering the issue, may be regarded as characterising the movement of events. Although intending to win, the expert "cannot foresee what any one actual move of his adversary may be" ("The Will to Believe," p. 181). But his resources are equal to all contingencies. He is prepared for all the possible moves which the novice can make and knows in advance how to meet each one of them. Meanwhile, we may add—and it is this which is really vital to the argument for freedom—*the novice is learning the game.* One wonders at times that men can be got to stand up night after night against a Hackenschmidt, content if they can only grip and be gripped by him for a few seconds or a few minutes at most before being thrown. The reason is that they are learning to wrestle; and local champions vie with each other for the opportunity to meet him. The alternativity in these cases is real enough. There are more ways than one of wrestling or of playing chess. *The variety of the ways is the making of the game.* Even the expert maintains his expertness by constantly meeting fresh modes of attack and by the adjustments he has to make to meet them.

CHAPTER IX

THE MENTAL PROCESS: (*d*) THE PLAY OF THE SUB-CONSCIOUS

In many of its aspects, truly, the problem of personality eludes us, so that he who goes furthest in the search knows best how much more there is to know. Each new finding of ourselves is like the discovery of a key to another, and as yet unopened, door. Whether we set out upon the quest with a desire for self-knowledge, or as teachers who desire to know in part at least how to answer the child's half-conscious questioning: "Who am I? What am I to be?", or from an interest in a deeper knowledge of human nature as social reformers, we find ere long that we have entered upon a path which leads on and on and is lost to our view in the great mystery that enshrouds all being. "The inmost secret of each man's heart is the secret of the whole world."

However we may be able at times to analyse mental movements or to unpiece the images which the mind holds before it, there is always present the deeper fact of a something unfolding which has not yet appeared. There is always a something that we can be, as well as the something that we have been; and what we *are* is interpretable only in the light of this double reference. Not only is the will to be, and what we will to be, part of our being, but an unexhausted capacity to will and to be. The words of the young American graduate at one of the meetings of the American Graduates' Union are really symptomatic of

the nature of human personality. "I have never seen anybody else that I wanted to be. Not that I'm self-satisfied! I want to be myself, only higher." "As reason gains in grasp," writes Professor MacCunn, "and as the horizon which it sweeps is for ever enlarging, the soul voyages on to unpathed waters and to undreamed shores. New ends rise before it, and of none can it be said, 'This is the last.' . . . And it is just the progressiveness of Desire that is the opportunity, the hope, and, if it do not find right nurture, the judgment, of the maker of character." Psychological analysis does not lay bare all that we mean when we speak of the self. We have normally a vague, and sometimes an acute, consciousness of something more than the historical self of experience—that is, the sum and the integration of all our states of consciousness from the first conscious stirring of life within the organism to the present time.

Here, evidently, is something of which account must be taken in considering the unfolding of personality. This resourcefulness of the self may have a twofold origin. It may be partly due to forces or tendencies born within us which have not yet attained to their complete development. It may be partly traceable to our contact with higher reality. The two sources are not easily separable. If we accept the view which alone seems to account for the facts of our mental activity—indeed, for personality in any of its aspects, namely, that the touch of Higher Reality is upon us from the first, that our inmost selfhood is a "portion of the Unknowable Energy," or a "differentiation of the Absolute" (as others would phrase it)—then the very forces and tendencies born with us bear the impress of the Higher Reality upon them; and we are genetically as well as teleologically partakers of the divine nature. The old Greek philosopher, Heraclitus, might well say: "Though you trod every path, you could not find the limits of the soul, so deep is its essence."

In the present chapter we are to see ways in which man's capacity for the wider outreach may be due to inner tendencies that belong to him at birth; or, as some would say, due to the vastness, and yet the solidarity, of the human life and the human experience that have preceded and that still environ him. These tendencies and capacity belong to that portion of our mental life which—though the term has been used in a variety of senses—we shall here call the "sub-conscious."

Since quotations from writers of very different schools of thought may serve to show how much attention this idea of the vast reach and deeper mystery of human personality is receiving, the facts will be presented chiefly in this form. Gustave le Bon provides one way of approach to this wider view in his work, "The Crowd: a Study of the Popular Mind." "Visible social phenomena," he says, "appear to be the result of an immense, unconscious working, that as a rule is beyond the reach of our analysis. So far as the majority of their acts are considered, crowds display a singularly inferior mentality, yet there are other acts in which they appear to be guided by those mysterious forces which the ancients denominated destiny, nature, or providence. . . . It would seem at times as if there were latent forces in the inner being of nations which serve to guide them. . . . Crowds, doubtless, are always unconscious,[1] but this very unconsciousness is perhaps one of the secrets of their strength. . . . Reason is an attribute of humanity of too recent date, and still too imperfect, to reveal to us the laws of the unconscious, and still more to take its place. The part played by the unconscious in all our acts is immense. . . . The unconscious acts like a force still unknown."

[1] In part, of course, the author means. There is a sense in which a crowd has a consciousness, almost a selfhood, of its own. This is true of a club, a well-organised school, and so on. We refer to it in speaking of *esprit de corps*

Individual experience presents analogous examples of the play of the sub-conscious. That there is a class of phenomena of the kind is beyond question. Indefinitely large the class may prove to be; it is very far as yet from being defined. Many more experiences will have to be recorded and experiments made before anything like definition can be arrived at. We may, however, without for the moment in any way particularising the process, start from the great evolutionary postulate that the present is somehow an outcome of the past. From this starting-point, there are two principal ways of accounting for the influence of sub-conscious tendencies. One of these suggestions is, that memories of ancestral or earlier racial experiences are in some way capable of re-awakening in the minds of those living to-day. According to this view, the individual mind not only normally shares in the *effects* of the experiences of earlier generations, but, under certain favouring conditions, *directly draws upon* these experiences. The memory of them, it is supposed, has not passed out of our reach by the passing away of those who had the experiences, but is held in the possession of some sort of "cosmic mind" or "cosmic memory" in such a way that it can be shared in by us. Though this theory may seem, on the face of it, less probable and more difficult of proof than the second of the suggestions referred to, namely, that there is in some way an inheriting in the active tendencies of the organism of predispositions towards certain experiences, it must be admitted that it helps to account for certain cases to which heredity hardly seems to apply. Here we shall merely point to some of the phenomena.

Mr. W. B. Yeats, in his volume of essays, "Ideas of Good and Evil," puts forward a number of examples from his own experience in support of the view of a cosmic mind or cosmic memory. He gives it as his belief (1) "that the borders of our minds are ever shifting and that many minds

can flow into one another, as it were, and create or reveal a single mind, a single energy; and (2) that the borders of our memories are as shifting, and that our memories are a part of one great memory, the memory of Nature herself." The second of these points may not appear as clearly as the first to follow from the facts Mr. Yeats has before him. Be this as it may, this notion of a merging of mind with mind, and of a cosmic or extra-personal memory, he illustrates in various ways. He tells how, when out one day he wove an imaginative story as to how things might have gone with him had a certain accident which had been imminent actually happened, amongst other things picturing his arm in a sling. On returning to the hotel he was welcomed with evident relief, as the servant had informed them that he was hurt, and that she had "seen him with his arm in a sling." This is cited as an example of the way in which minds can flow into one another; or one mind come under the spell of the imagination of another. A well-authenticated example, showing how a wife woke up suddenly after dreaming that she had received an injury which it was afterwards proved that her husband was at that moment receiving, was contributed by Ruskin to "Phantasms of the Living." As illustrating the linking together of ideas across a long interval of time, Mr. Yeats tells of having seen a young Irish woman fresh from a convent school cast into a profound trance, though not by a method known by any hypnotist. "In her waking state she thought the apple of Eve was the kind of apple you can buy at the greengrocer's, but in her trance she saw the Tree of Life with ever sighing souls moving in its branches instead of sap, and among its leaves all the fowl of the air, and on its highest bough one white fowl bearing a crown. When I went home I took from the shelf a translation of 'The Book of Concealed Mystery,' an old Jewish book, and cutting the pages came upon this passage, which I cannot

think I had ever read: 'The Tree, . . . is the Tree of the Knowledge of Good and Evil . . . in its branches the birds lodge and build their nests, the souls and the angels have their place.'" Another incident may be given also in Mr. Yeats's own words. "I once saw a young Church of Ireland man, a bank clerk in the West of Ireland, thrown into a like trance. Presently he came to the edge of Eden, and there he found himself not by the wilderness he had learnt of at the Sunday School, but upon the summit of a great mountain. The whole summit, in contradiction to all that would have seemed probable to his waking mind, was a great walled garden. Some years afterwards I found a mediæval diagram, which pictured Eden as a walled garden upon a high mountain. Where did these intricate symbols come from? Neither I nor the one or two people present or the seers had ever seen, I am convinced, the description in 'The Book of Concealed Mystery,' or the mediæval diagram. Remember that the images appeared in a moment perfect in all their complexity.[1] If any one can imagine that the seers or that I myself or another had indeed read of these images and forgotten it, that the supernatural artist's knowledge of what was in our buried memories accounted for these visions, there are numberless other visions to account for. One cannot go on believing in

[1] *Op. cit.*, pp. 56–8. It is worthy of remark that before wandering in imagination to the edge of the garden of Eden, the young man had "seen" and described the Tree of Knowledge of Good and Evil in very much the same way as the girl had done. One wonders whether, and how far, there may have been in this case at least unconscious suggestion from Mr. Yeats's own mind. Even if this were so we have here examples of minds flowing together, one being sub-consciously affected by another. The record is carefully made and the possibilities of explanation were evidently carefully considered before publishing the accounts. For other records see pp. 27–8, 326–30, and elsewhere.

improbable knowledge for ever. For instance, I find in my diary that on December 27, 1897, a seer, to whom I had given a certain old Irish symbol, saw Brigit, the goddess, holding out 'a glittering and wriggling serpent,' and yet I feel certain that neither I nor he knew anything of her association with the serpent until 'Carmina Gadelica' was published a few months ago." "Why, too," the same writer asks, "among all the countless stories of visions that I have gathered in Ireland, or that a friend has gathered for me, are there none that mix the dress of different periods? The seers when they are but speaking from tradition will mix everything together. . . . Almost every one who has busied himself with such matters has come, in trance or dream, upon some new or strange symbol or event, which he has afterwards found in some work he has never read or heard of. Examples like this are as yet too little classified, too little analysed, to convince the stranger, but some of them are proof enough for those they have happened to, proof that there is a memory of nature that reveals events and symbols of distant centuries. Mystics of many countries and many centuries have spoken of this memory."

In apparent harmony with this view of a funded experience, of a psychical or spiritual solidarity yielding a sort of "cosmic mind" or "cosmic memory," is the fact of the deep-seated massive emotions that are stirred when appeal is made to a wide range of human experience in connection with which kindred emotions have long been felt. Great art and great literature owe much of their appeal to their presenting what has some such universal reference and meaning, and so has this rich emotional setting. Poetry and art are often the expression of a people's life. Granting the solidarity which this implies, we have here one of the conditions of a national art or a national literature. The very sentiment of nationality bespeaks a many-stranded

solidarity. No one can have met with it in a people still unmixed, *i.e.*, still a *people*, without being deeply impressed with it. The same nature—sky, earth, sun—whose beauty and whose ministries have gladdened generation after generation; early united wrestlings with the elements; early battles with common foes; all the continuous life from then till now:—these blend in an almost impersonal passion, the enthusiasm of race.[1] "A race has all the characteristics of an organic being. It has its patriotisms, religions, and warlike and other enthusiasms, belonging to it only *as* a whole, and called forth somehow by the sentiment of the whole." [2]

From the point of view of the individual, all this implies that his life is, consciously or sub-consciously, continuous in these respects with the life of the past. Certainly if there are these elements within the self, however we may account for their presence, the educator, for one, cannot afford to neglect them. Especially is this the case if they are in any degree specialised, that is, have in part a specifically national aspect. In so far as this is so, the more the educator imbues himself (without narrowness or exclusiveness) with the spirit and genius of the national life, the more

[1] I have in mind in writing this sentence memories of the kindling patriotism of Scandinavians—most of them teachers—studying at the famous Sloyd school at Nääs under the late Otto Salomon. Readers who know Nääs or who know Scandinavia at all intimately will remember the national song: "Du gamla, du friska, du fjäll-höga Nord." The second verse begins by referring to the nation's life as enthroned on memories of bygone days, and contains the line, "I know that you are and remain what you were." The effect of quoting it in Swedish at a united gathering of students: *Jag vet, att du är och du blir, hvad du var,* showed how peculiarly intense is the consciousness above described amongst those who are still a *people,* comparatively speaking unmixed. "A people alone is a great river."

[2] Ed. Carpenter, "Art of Creation," pp. 90–1

profound his influence will be. Foreign teachers seldom succeed with their scholars so well as teachers of the same nationality, not because of lack of personal sympathy or individual strength, but because of the absence of those overtones which give to speech, especially the speech of a leader or teacher, its true timbre. It is a subtle point. But it has its place in the study of the forces that make for great teaching.

Though much of what has been so far referred to may be equally well explained on the second main theory of the source of such sub-conscious elements in human life, yet, in view of the large number of phenomena upon which the hypothesis of the spiritual solidarity of the universe throws light, it is not to be wondered at that many have traced in facts like these something of the nature of a real psychical or spiritual solidarity, whereby men's minds move together in the mass and have within them almost conscious echoes of the voices of the past.

The other broadly distinguishable view as to the way in which the past lives on in our life to-day is that of hereditary transmission. There are two chief interpretations of such transmission; the one is that it is by social tradition, the other that it is through the blood. In the former case, the chief and determining factor is the modifying of environment; in the latter, there is an accompanying transmitted modification of the self. So far as the inheritances of which we are speaking are vested in the self, this theory as contrasted with the "cosmic mind" theory traces them to the transmission of tendencies towards behaviour rather than to any possession of or even special susceptibility to ideas. What is transmitted, that is, is rather of the nature of instinctive tendency. The *instruments* of experience are inherited, not the experiences themselves. In this way, experiences which have figured prominently in the life of bygone generations may tend to repeat themselves; but

their appearance will be due to the arising of occasions to act.[1]

With an apparent leaning towards the hypothesis of shared memories as explaining many of the sub-conscious aspects of human personality, "*the presence*, in fact, within that soul, *of the myriad life and emotion of those who have gone before*," Mr. Edward Carpenter in his book, "The Art of Creation," has brought forward a number of instances which really seem to be more readily explained on the theory of the inheriting of quasi-instinctive tendencies. Myths and legends seem to him to contain so deep a sentiment and meaning, because they are the "selection and affectionate preservation" from the life of the race of events and stories which illustrate and symbolise some of the deep instincts and enthusiasms of the race. "The ideas and enthusiasms which produce myths and legends lie deep down in the very structure and physical organisation of humanity. . . . They are things of age-long life and importance." But it is clearly open to the reader to say that if the instincts are there, that is, if the *tendencies to react* responsively to the appeal of myth and story are transmitted, this is all that we need. We do not need to postulate an organic transmission of ideas and enthusiasms.

In the present state of our knowledge, it is scarcely possible to do more than speak in alternatives. Whilst, on the one hand, the conception of solidarity may be found to have a very wide application, especially in the influence of contemporary minds upon each other, as in telepathy; on the other hand, the difficulty with respect to a "cosmic memory" lies in seeing how experiences, as distinguished from the instruments of experience, can be passed on or transmitted.

[1] There are cases, however, which seem to have a hereditary quality and yet to have little of the organic sensori-motor character which would mark them off as instinctive.

Mr. Carpenter, still referring to the explanation just quoted, says: "The strange psychology of passion is difficult to understand in any other way—the inordinate enchantment which surrounds the pleasures of the Senses, so disproportionate to the actual enjoyment experienced; the mania to which it may give rise—of Drink, of Greed, or whatever it may be; the sense (so frequent) of a diabolic power impelling one; the abhorrence, even while they are being perpetrated, of the actions which we call our own. All this seems only explicable by the fact that we bear in our bodies the experience and memory of countless beings." Mr. Carpenter refers similarly to the emotions of fear, wonder, love, and the miserly instinct. But in all these cases, as in those above referred to, the theory of the inheriting of tendencies seems more naturally to apply.

So far we have spoken more especially of those sub-conscious reserves or resources of personality which force their way into our ordinary experience. Just as overtones are almost invariably present together with the fundamental note produced by a string, and upon the number and relative strength of the overtones depends the quality of the tone produced; so a rich mentality or strong personality may be largely due to the richness of the sub-conscious life.

But there is a still larger store of potentiality which never directly appears; but which may yet have its sub-conscious effect in the making of our personality. This wide range of, so to say, possibilities of personality may belong either to our physical or to our mental and spiritual being. Certainly, the vast capacity and complexity of our nervous organism, great portions of which even in those who live the fullest life are partially undeveloped, leave room for modifications and tendencies of which our normal experience makes no use.

In a recent paper,[1] Professor Sherrington, of Liverpool,

[1] Published in *Nature* for April 16, 1908.

illustrated by the study of two muscles the enormous complexity of nerve and muscle co-ordination involved in a simple reflex movement. The co-ordination in even a simple reflex may be "likened to that exhibited by a vast assemblage of instruments in very perfect orchestration directed by a supremely able conductor." Of how many other movements are the possibilities here implied, in which the orchestration is less perfect or which are directed by a "conductor" whose interpretation is somewhat different! The possibilities of other than the normal responses are here in profusion. Inexhaustible permutations and combinations, all yielding data to consciousness, are conceivable. And what is more to our purpose, an almost infinite number of such combinations must at one time or other have actually occurred. Countless past activities and past uses in the life of the developing organism are represented in the human body as at present organised. The body is thus capable of being the instrument of a vast range of experiences, which, from the point of view of the finite self with its brief span of life, are abnormal or sub-normal. This is the view of Ribot. "The sum of the states of consciousness in a man is," he says, "very inferior to the sum of the nervous actions. . . . During a period of, say, five minutes a succession of sensations, feelings, images, acts, is produced in us. It is possible to count them, and to state their number with tolerable precision. During the same period, in the same man, there is produced a much larger number of nervous actions. *Conscious* personality, therefore, cannot be the representation of *all* that takes place in the nervous centres."[1]

Or, approaching the matter from the mental side, a noteworthy contribution to the study of the subliminal

[1] Ribot, "Diseases of Personality." Authorised translation. The Open Court Publishing Company, Chicago. Page 150. See also p. 154.

elements in human personality is that of the late F. W. H. Myers. To him, man is spirit operating for the time being through a bodily organism. Owing to his physical limitations he is straitened in expression, the spirit greatly transcending our bodily capacity to manifest its many-sided life. "The conscious self of each of us, as we call it, the 'empirical self' —the supra-liminal self, as I should prefer to say—does not comprise the whole of the consciousness or of the faculty within us. There exists a more comprehensive consciousness, a profounder faculty, which for the most part remains potential only as far as regards the life of earth, but from which the consciousness and the faculty of earth-life are mere selections, and which reasserts itself in its plenitude after the liberating change of death."[1]

It is interesting to set these views side by side. We have Ribot, on the one hand, saying that "conscious personality is never more than a feeble portion of physical personality"; Myers, on the other hand, regards the higher personality as greatly transcending the powers of expression vested in the physical organism. Each may be true.[2] Ribot's view, as we have seen, points to the fact that, when we consider the vast complexity of our physical organism and its adaptability to the calls of the environment, the self of experience is but a selection from a great number of possible selves of experience. Myers's view also emphasises the possibilities of the self; but from an almost opposite standpoint. The actual self of experience, the "empirical self," is the same in either case. Only, the one sees how rich is the provision

[1] "Human Personality," vol. i. pp. 11–12.

[2] Readers of Myers's "Human Personality" will remember that he expresses his willingness to accept Ribot's theory of the self as a co-ordination, only stipulating that the analysis of the elements co-ordinated be completely made. And remembering that Ribot says that his theory "can be adapted to any metaphysics," the way is left open on both sides for combining the results of the two theories.

of alternatives which the body furnishes; the other, realising that in spite of this rich provision, the very nature of experience necessitates selection, and that the body by acquiring habits helps to fix personality, sees how wide the range of mental and spiritual possibilities would be, could they be conceived of as existing apart from such physical fixation. What we are, from this latter point of view, is but a faint showing of what we might be, and yet may come to be.

All this goes to show how much *possible* experience our normal experience inhibits. Had we gone to a different school; lived in different social, industrial, political surroundings; selected a different calling; followed up a different hobby; read a different set of books; travelled more or less, and here instead of there; and so on indefinitely; each slight deviation would in some way have altered us. So far as latent possibilities of behaviour go, we could have been any one of a thousand different men varying more or less from the men we are.

As to the part played by these sub-conscious influences in the development of personality, it would almost seem as if the mystical and the practical temperaments divided their effects between them. The man who, moved by inscrutable forces within him, acts upon his practical impulses taps sources of supply and awakens resonances which would otherwise be missed. The mystic, of receptive mood and temper, also touches upon or is touched by the vast territory which lies beyond the self of our ordinary experience. And each is affected in his own inner life and power by what he gains. The sub-conscious world, that is to say, is not only a storehouse. It functions, and functions continuously. At times it, doubtless, enters as an enriching element into conscious experience.

These resources scarcely seem to be at the educator's command; so that he can call them into play in the life of

his scholars. If they are, it is a domain of educational theory that is still unexplored.

As to practical suggestions :—(*a*) There will be times at which the parent, if not the teacher, will feel under constraint to allow the child to go his own way. Children, as one most practical and most able exponent of the principles of child-study has said, ought to be allowed time to be alone with themselves. An everlasting oversight by nurse or governess or anxious parent may be pernicious. There is more to happen in the complete unfolding of a single personality than the adult can make happen or even help to happen in the child, save by sometimes leaving him alone. (*b*) But an opposite suggestion springs up upon the very heels of this. The child's experience may be so ordered, the teacher's or the parent's touch upon his life may be so directed and modulated, as to assist the production of the overtones. For, as the physicist tells us, "the point at which a string is plucked or bowed exercises an important effect on the overtones produced." Here the educational aspect of the question again appears. The right touch upon the life—any life—is always helpful in bringing out the harmonies. All kinds of elements may be latent. It may well be that "the so-called bad boy needs some one to start the machinery of his life into operation." Were a complete education possible, which it obviously is not, all capacities, the latent and potential as well as the partially developed, would be unified and utilised. Elements which now normally remain latent in the individual would contribute their share to his total life. But a complete education, and with it a complete unfolding of our potentiality, is not possible—life being altogether too short for the purpose. As teachers we wish to take to heart the boy's unspoken inquiry: Who am I? What am I to be? But to answer each according to his own nature and his own need would require that we should be

possessed of something of Nature's own versatility. The teacher stands in the name of the universe before the boy to interpret to him all he can of the world that is around him, and of that personal life, almost infinite in its outreach, that is within him. It is a great task in which we are co-workers with the vast evolutionary process—

> "Some call it evolution
> And others call it God."

To quote once more the words of Caird, completing the sentence which contains them: "The inmost secret of each man's heart is the secret of the whole world, and if we only go deep enough we can evoke an echo in every breast."

SUGGESTIONS AND ILLUSTRATIONS.

1. There are, of course, many other phenomena of subconsciousness than those touched upon. There are, for example, remarkable instances of unconscious memory. One such instance, which was made the subject of careful inquiry, is described in detail by Coleridge ("Biographia Literaria," p. 59). An illiterate young woman seized with a nervous fever incessantly talked Latin, Greek, and Hebrew in pompous tones and with distinct enunciation. She was pronounced by the priests and monks of the neighbourhood to be possessed of a very learned devil. But, by the enterprising industry of a young physician who attended her, her history was traced back to a time when she lived with an old Protestant pastor whose habit had been to pace up and down his house reading aloud from his favourite authors. The physician was even able to identify many of the passages which she quoted in books which had belonged to the pastor's library.

2. Dr. Sophie Bryant's words have been already quoted that there is in all mental activity an instinctive, as well as a

conscious or ideal, source of energy. She continues: "The ideal source we can explain in the reasons we give for the act, but it may well be that the energy of the movement chiefly depends on some instinct that hides itself in the silence of unconsciousness. These silent instincts are only known in their effects: they predetermine the flow of feeling, the direction of attention"; and by them "the whole mental life is subjected to an inner shaping force of which consciousness gives no *direct* account. Such shaping instincts make up, in the first instance, the original character—be it of 'original sin' or of original righteousness."

Dr. Bryant goes on to show, however, that "these shaping instincts can themselves be shaped: the development of character in adaptation to circumstances, or to the ideal of character, is such a shaping." With the latter the moral educator is concerned.

3. In a recent address before the American Philosophical Society on "The Energies of Men," Professor James said: "The normal opener of deeper and deeper levels of energy is the will. The difficulty is to use it; to make the effort which the word volition implies. But if we *do* make it (or if a god, though he were only the god Chance, makes it through us), it will act dynamo-genically on us for a month. It is notorious that a single successful effort of moral volition such as saying 'no' to some habitual temptation, or performing some courageous act, will launch a man on a higher level of energy for days and weeks, will give him a new range of power."

CHAPTER X

INTUITIONAL AND SUPRA-RATIONAL ELEMENTS IN EXPERIENCE

BEFORE continuing the inquiry into the resourcefulness of human personality in ways that appear not to have their origin in ordinary individual experience, it is as well to note that there is no discounting of the value of the ordinary forms of experience, which are the very staple of our individuality, in calling attention to the existence of other streams of tendency which occasionally—perhaps more often than we are aware—become tributary to the main stream. It is easy to see the necessity of the limitations which hedge in our experience. By hedging it in they not only mark it off as ours; they make it ours. Experience is necessarily selective.

Of the forms of intuitional experience, or forms of intuition in experience, to be noticed in the present chapter, at least two seem to strike upon new territory. The term intuition, even avoiding all reference to the ethical use of it, has several meanings; and, for the sake of clearness, two of them must be briefly touched upon before concluding this rapid study of phases of the unfolding of personality by referring to intuitional and "supra-rational" elements which seem to be of a different order from the forms of mental activity considered so far.

(1) Intuition is sometimes used of the mental activity

which yields us our sense-experience. By the very nature of the mind avenues of approach belong to it whereby things are experienced as they are. I take an object, say a hat. A Hottentot might conceive of a hat, when he sees one for the first time, as a carrier for ostrich eggs or as a kind of detached pocket for any carrying purpose. To him, as to me, it is a rounded object capable of receiving some other object or objects. Never having seen one worn, instead of putting his head into it, he may put into it an ostrich egg, or loose beads, or other articles. Whilst his apperception of the object is different, his handling and use of it show his reception of the presentative parts of the experience to be the same. This mental attitude is often spoken of as intuition. It is what we get by "looking at" an object (*intueor*) or by a direct sense-impression of it through any of the senses.

(2) Intuition is most commonly used to denote a power of immediate judgment whereby we show in certain cases a spontaneous readiness to receive an idea. There are certain principles which in the common concerns of life we habitually take for granted, without being able to give a reason for them beyond the fact that what is manifestly contrary to them is "what we call *absurd*." They are truths which, as Aristotle says, do not depend upon other truths for their acceptance, truths which are so self-evident that they can rest upon no further truth as their reason (ὧν οὐκ ἔστι λόγος). Such are the logical axioms or laws of thought, and mathematical axioms.

The logical axioms are familiar to students, and are expressed in the form: *A is A; A cannot be both B and not-B; A is either B or not-B.* They are spoken of in logic as the fundamental laws of thought. In what sense are they this? So far as our previous study has led us, they are not thoughts that seem to be fundamental, but tendencies. Can we speak of these in the same way as tendencies? If

so, intuitional knowledge in these cases at least will be an effect of the directions which the mind is bound to take rather than of impressions which it is bound to receive. The latter is the usual idea we have of an intuition. It is thought of as a truth in the presence of which the mind is so far passive that it has nothing further to say. It accepts it as self-evident. But if *tendency* is the really fundamental thing in mind, the bond of unity and continuity within it, there cannot well be any such passive acquiescence in what is presented. Rather will these axioms be in some way spontaneous tendencies, or judgments following closely in the wake of spontaneous tendencies. Are they? The first thing to be said by way of answer is that the pure and simple knowledge-value of these propositions is so slight, that, implicit though they may be in all our thinking, those who never formulate them lose little by not doing so. If they are directly received pieces of knowledge they do not tell us much; nor, if their discovery depends upon analysis, does the result of the process leave us much better informed than we should be without it. But if, in the guise of formulæ, they name tendencies; then they do at least point to something and reveal to us real aspects of the mind's working.

First, *A is A*. It this, instead of being a mere truism, is but the briefest way of describing the mind's tendency to hold to, and assert the validity of, its own experience, it is a formula worth noting. It is a fundamental law of the mind's movement. Apart from it there would be no mental activity, for there would be nothing to start from. The mind must hold its ground to this extent if it is to be a mind at all. For, if *A* were not *A*, at least for all the time that I am talking about it or behaving towards it, there would be no possible starting-point for knowledge, for behaviour, or for mind itself. We could lay hold of nothing. The very apparatus of experience—sense-organs, nerve and brain structure—is

A is A, A cannot be both B & not-B;
A must be either B or not-B

stable. Why should it be so, if not to give us data that are stable? Anyhow, everything in the way of mental progress or even of mental beginnings depends upon the mind's acting in the faith of the persisting identity of what is before it. *A*, the mind says, is *A*. It is the first article of its practical belief, the faith it acts upon. If, for example, the child did not expect the object *A* towards which he instinctively puts out his hand to continue to be the same *A*, at least for so long as impression and reaction last, there would be no such thing even as instinctive behaviour, indeed, instinctive modes of reaction could never have been set up at all.

This "expectation" is not, of course, an explicit faith. It is rather a fundamental tendency. We may account for it, or for its necessity as the fundamental law of mind, in this way: If all past happenings, or a sufficient number of happenings to prevent practical certainty, had resembled the Irishman's experience that "when he put his hand where the flea was, it wasn't there," it is evident that neither instincts, on the one hand, nor rational experience, on the other, would have had any beginning. The first of the logical axioms, as it actually appears in our mental history, is thus the practical expression of a practical faith that reality is self-consistent.[1] The verbal *expression* of this faith is certainly a judgment. And it is so clearly implicit in ordinary intercourse that its truth is assented to the moment it is put into words. It is thus an intuition, a spontaneous act of cognition. But it had countless practical expressions before it was accorded verbal expression. The real assertion of *A is A* occurred when the mind acted as though *A* were *A*; that is, on every single occasion of its acting at all. It was a tendency before it was a judgment. It was the way

[1] The small child's enjoyment of the game of "Bo-peep" is due to the fact that an instinctive faith, one indeed on which instinct itself depends, is being satisfied, when the face of the one who is playing with him re-appears.

the mind started; the only way in which it could start. When it does receive verbal expression it is self-evident, an intuition; but its roots run down into native *tendency*. This is what seems to be really the case.

A precisely similar argument applies to the axiom: *A cannot be both B and not-B.* It belongs to the very nature of mind that it cannot move in opposite directions simultaneously. To say that the mind starts from *A* in two opposite or mutually contradictory directions is but to say that it does not start at all. It reduces the movement to zero. This condition, then, may rightly be called, as in Logic it is called, one of the "fundamental laws of thought." Apart from it, there would be no thought. Here again, though the result is best spoken of as a cognition, it is a cognition of which the essence depends upon the nature of mental activity. It is a self-evident law of direction. It is an axiomatic statement of the way in which mind must *go*. But, as in the former case, it is acted on as a tendency long before it is realised as an axiom. Taken together, these two principles of "identity" and "non-contradiction" are the strands of self-consistency which run through the whole of our mental activity, without which the mental life would have no direction, and without which, in every way that we know it, mind would not be.

The third of these fundamental laws is even more evidently and directly related to the mental life as an activity. Some predication, it practically says, is necessary. Some direction must be taken. *A is either B or not-B.* We must make choice between contradictories, else the mind would be at an eternal standstill. In other words, mind must function. A generic description of native tendency, however, is the tendency of an organism to function in accordance with its own nature. As applied to the human mind, the fundamental law is that some predication must be made, some judgment must be arrived at. This is but a more definite way of

saying that the mind must have direction. It affirms it in terms of the end aimed at, namely, judgment or predication. Thinking, in other words, is inconceivable apart from some decision between contradictories. Predication implies such decision, and is thus necessary. The axiom is certainly cognitive in form. It is itself a judgment. But it was a fundamental and absolutely essential principle of the mind's behaviour long before it rose up in the mind as a judgment. Its purport is to assert the necessity the mind is under of moving towards knowledge, and the data it yields are so directly practical that it may be alternately regarded as a proposition—*A is either B or not-B*—that is, as a cognition, or as a precept of the *conduct* of the understanding, an expression of the fact that mind must work and of the way in which it must work. Mind, or mental activity, being what it is, the necessary direction it must take is that of predicating. It cannot be a mind and not move in the direction of *A is either B or not-B.*

These logical axioms have been specially dealt with because they are forms of intuitional knowledge, knowledge given by immediate insight, which are known as "the fundamental laws of thought." They are certainly fundamental. They belong necessarily to the movement of the mind, and so to the unfolding of personality.

As judgments they appear to be arrived at by reading off the direction of an instinctive tendency. They are self-evident; but they derive their necessity from that of the fundamental tendencies whose course they follow. Judgments, even self-evident judgments, may arise "by back-stroke,"—*i.e.*, as mental assertions following in the wake of events. For example, a man once told me of a great storm of wind that occurred in his boyhood, blowing part of the roof off the house he lived in on the Yorkshire hills. The ground was frozen over after snow and rain and, being sent for help, he had to slide down the steep path,

toboggan-fashion, seated on a flat stone. He found the man he was sent for, and as no time was to be lost if the damage was not to spread, the man said to him, "Can you keep up with me?" and started to run. He was soon on his back. "Is it slippy?" he asked. "Aye, doesn't it look like it?" was the answer. The cognition had come by back-stroke. Of course, there is here an element of inference: "Have I fallen because it is 'slippy'?" But the illustration roughly bears out the point before us, namely: first an event, and then a cognition corresponding to it.

So regarded, the logical axioms or "fundamental laws of thought" resemble other mental elements which we have been considering. If the account given of them is the correct one, they are really basal tendencies of our mental activity, and in the absence of these tendencies, the unfolding of personality, as we know it, would never begin.

(3) The intuitional elements in experience that have so far been considered have their origin, probably, in endorsed experience, to which the mind of the race, in the course of its long evolutionary history, has become habituated. But there are insights, which seem to be best described as intuitions, which lead us along new ways. They are anticipations of, or point the way of, experience, rather than being reminiscences and ingrained results of experience. In virtue of what does the mind seem to leap forward to new points of view? There are movements from the centre of man's finite individual consciousness which overshoot the limits of all previous attainments. Such movements are facts which any account of the nature of mind must find a place for. They must be catalogued, even if they cannot be explained. All great insights contain an element which goes beyond previous constructive efforts in the same direction. The enthusiasm of Archimedes be-

tokened a great mind-movement, a lurch forward, so to say, and a grasping of what had hitherto been out of reach. Many cases might be quoted of mathematical and scientific discovery which have "flashed in upon the mind." Every field of knowledge furnishes examples. Clearly, there is some sort of native capacity in mind which prevents its being confined within the limits of past attainments. It not merely adds up and generalises; it originates. The power of the mind to add up and generalise Spencer well describes as the over-extending adaptation of the cohesions of psychical states to the connections between the answering phenomena. But mind does more than attain to correspondence with phenomena. "The primitive intelligence" Mr. Hobhouse speaks of in "Mind in Evolution" as useful in adjusting the organism to its environment. But as the mental powers develop "the tables are turned, and the mind adjusts its environment to its own needs." How must we conceive of the mind which has this power to turn the tables on its own environment? There seems to be but the one answer, that it is possessed in some way of a higher intuitional power to look beyond fact. It is this power which leads it on. If at the level of our ordinary understanding "the ideal which our thought involves may fairly be described as that of a higher self,"[1] still more in this higher intuition the mind has "a point of view which it ultimately seeks to occupy, and which it partly succeeds in occupying." We have, as already seen, what bears the appearance of an infinite ideal, combined with and in part constitutive of our consciousness. Nor does there seem to be any real contradiction in the presence within the original nucleus or the potential self of elements that have not yet unfolded. Now it is possible to go a step further and to note the existence, side by side, of ordinary

[1] Mackenzie: in the article previously referred to on "Bradley's View of the Self," *Mind*, N. S., vol. 3.

finite experience and a higher range of experience yielded by our powers of supra-empirical intuition from which the history of our finite personality is in part derived. The self is not finite in the positive sense in which a cube is finite; it is finite rather in the negative sense of not being infinite. Something of the not finite stirs within the self; and it is this, not its finitude, which essentially makes it *a self*.

It is necessary just to indicate the bearing of this power of intuition, the vision that goes in advance of fact, upon the unfolding of personality in the moral sense. There is, as Professor MacCunn says, a "consciousness of unrest that disquiets and often torments even those who lead full lives, from Carlyle's 'infinite shoeblack' upwards."[1] When an ethical genius emerges to interpret and give play to this tendency within us towards a higher selfhood—a Lincoln, or a Wilberforce, or a Howard—his function is not merely the drawing together of past estimations of conduct, or past valuations of life. His seeing is not merely a product of the accumulated insights of others; it is direct and individual. *He* sees, and the effect of his seeing is to discover for others some new quality in human life, and to give it value. To-day new visions of the possibilities of human life are reaching many minds. Intolerance of slums, the beautifying of cities, concern for posterity, are becoming commonplaces of social and ethical discussion. Vast contributions were made in the last century, political, social, educational, and will go on being made in this, towards the attainment of "the life which best realises the best instincts of man"—which has been rightly said to be the chief end of the State. To quote Westermarck once more: "Far above the vulgar idea that the right is a settled something to which everybody has to adjust his opinions, rises the conviction that it

[1] MacCunn, "The Making of Character," p. 32.

The consideration of ethical aspects of the unfolding of personality is held over for treatment in a separate volume.

has its existence in each individual mind, capable of any expansion, proclaiming its own right to exist, if need be, venturing to make a stand against the whole world. Such a conviction makes for progress."

(4) We used the term "sub-conscious" to denote the subliminal store of what has, either in our own experience, or in that of our ancestors, once appeared above the threshold of consciousness. We may adopt the phrase used by Professor S. S. Laurie in his Gifford Lectures—"supra-rational intuition," to indicate that there are things we do not attain to, and which our ancestors have not attained to, which none the less we are. Myers's view, referred to a moment ago, is practically this. It points to what we are in virtue of our being in touch with the spiritual whole of things. "We are conscious," says Dr. Martineau in one of his addresses, "however faintly, of aspirations and affections, of a faith and wonder, of a hope and sadness, which bear us beyond the margin of the earthly and finite, and afford some glimpse of the infinitude in which we live."[1] He speaks of infinite affections and desires which "press severely against the finite conditions of our existence." Amongst these affections of our nature, Martineau mentions the yearning for truth, the delight in beauty, the veneration for excellence, and the high ambition of conscience ever pressing forward yet unable to attain. In the impelling force of these affections, acting sometimes almost as a necessity laid upon us, we have a manifestation of powers and tendencies within us, traceable still to a principle of solidarity, but not so much to a solidarity of man with his kind, as with a something, a Power not ourselves, working within us for the greatness of our finite individual spirits. "At moments," as Maeterlinck says, "we might believe it to be a recollection, furtive but excessively keen, of the

[1] "Endeavours after the Christian Life," People's Edition, pp. 43, 46, 47.

great primitive unity." However we may describe it or seek to account for it, it is a fundamental spiritual element in human selfhood.

> "Like the tide on a crescent sea-beach,
> When the moon is narrow and thin,
> Into our hearts high yearnings
> Come welling and surging in;
> Come from the mighty ocean,
> Whose rim no man has trod,
> Some of us call it Longing,
> And others call it God."

The two names are aspects of the self-same fact. A favourite quotation of Romanes was from St. Augustine: "*Fecisti nos ad te, Domine; et inquietum est cor nostrum donec requiescat in te.*"

A suggestion as to the metaphysical basis of such a capacity of supra-rational intuition ("rational" being taken in its logical sense as referring to results or conclusions arrived at from empirical data) is furnished in the note, already referred to, added by Spencer in the "Corrections and Additions" prefixed to the first volume of the second edition of his "Principles of Psychology." It forms part of a series of notes on the self, in which allowance is made for an "implied, but unknown substratum." To quote the full passage: "The aggregate of subjective states constituting the mental *I* have not," says Spencer, "in themselves the principle of cohesion holding them together as a whole; but the *I* which continuously survives as the subject of these changing states, is that portion of the Unknowable Power which is statically conditioned in special nervous structures that are pervaded by a dynamically conditioned portion of the Unknowable Power called Energy." These words can only mean that the self, as a portion of the Unknowable Energy, is vitally connected with that perva-

ding energy. The part shares in the being of the whole, and is directly moved and animated by it. And, clearly, since we are part of the system of reality, and we are possessed of consciousness, *consciousness has somehow a part in the pervading and animating Energy.* May not our consciousness in its higher forms be so closely in touch with the Higher Consciousness as to read off intuitively some faint portion of the meaning and tendency of the whole? For, keeping for the moment to Spencer's definition, the Unknowable Energy is conceived as dynamically impressing itself upon the finite mind. The finite mind may, therefore, be thought of as in some way fitted to read off and respond to the vaster meanings and purposes in which it thus participates. It would almost seem a necessity for it to be so, if a self-conscious agent is really to be successful as a "portion" of the Unknowable Power. We should have, however, to modify Spencer's phraseology in one respect. For the Power that evokes satisfactory responses within its self-conscious members is to be regarded not as Unknowable but as, to that extent, both knowable to and known by the responding mind. Any such power of knowing and responding would be a real element in our personality; but it would be supra-rational; for it is not based on experience, but rather on the direct relation supposed to subsist between the finite self and its immaterial environment.

And, whereas sub-consciousness, in the sense in which we have spoken of it, looks back largely to ancestral experience, and unifies us with our race, this dynamic conditioning of cohesion within the mental life by the Unknowable Energy establishes—if it be accepted—a unity of a more transcending kind. Certainly, the leaders of the world's thought and life are often those who reveal to man his oneness with Higher Being, and who impel him to seek the fuller realisation of that relationship. Great speech,

great literature, great art, often come home to us laden with suggestions of higher achievement than our past can boast, of a higher selfhood than we have yet attained. What great writer or painter when doing his greatest work limits his conception of the good, the beautiful, the true, to the best, most beautiful, and truest so far reached? *Whence* emerge desires, which justify, as Professor MacCunn well says, the Greek description of desire as insatiable (ἄπλητος)? If we are conditioned by an immaterial essence, such as Spencer calls Unknowable Energy, then this dynamic intensity may be accounted for. Man is then essentially a spirit, but a spirit aware of its own incompleteness, and striving towards completeness. And the words we have quoted from St. Augustine, addressing the vast Environing Self, alone finally explain this striving. In the same wistful strain Matthew Arnold writes in his poem, "The Buried Life":—

> "But often, in the world's most crowded streets,
> But often, in the din of strife,
> There rises an unspeakable desire
> After the knowledge of our buried life,
> A thirst to spend our fire and restless force
> In tracking out our true, original course;
> A longing to inquire
> Into the mystery of this heart which beats
> So wild, so deep, in us."

But there are rare moments, the poet concludes, when there arrives a lull in man's hot race,

> "And an unwonted calm pervades his breast.
> And then he thinks he knows
> The hills where his life rose,
> And the sea where it goes."

Or, to quote Emerson—for it is to the seer and the poet

that we need to look in this connection:[1] "There is a principle which is the basis of things, which all speech aims to say, and all action to evolve, a simple, quiet, undescribed, indescribable presence, dwelling very peacefully in us, our rightful lord: we are not to do, but to let do; not to work, but to be worked upon; and to this homage there is a consent of all thoughtful and just men in all ages and conditions. To this sentiment belong vast and sudden enlargements of power. . . . We are never without a hint . . . that we are one day to deal with real being,—essences with essences." "Supra-rational" Emerson would, doubtless, be content to have this called. "The heart has its arguments," he says in the same essay, "with which the understanding is not acquainted." And Wordsworth translates into terms of individual consciousness the relationship which Spencer describes as necessarily existing between the self and the conditioning Unknowable Power, in the well-known lines in which he speaks of—

> "A sense sublime,
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean, and the living air,
> And the blue sky, and in the mind of man."

On the whole, therefore, the term "supra-rational intuition" may serve to describe this element in human selfhood which goes beyond the ordinary facts of experience. Professor Laurie, from whom the term is taken, describes the facts it stands for, much as Emerson does, as facts of feeling. "As an organism of Feeling in all its mystic range as distinct from reason, the rational subject can find no rest"—and

[1] If it were not justifiable so quote the poet's experience in this connection, introspection would be at once discounted as a psychological method; and a large portion of race experience set on one side.

here Professor Laurie proffers the clue to our essential being which in varying degree is suggested by all the preceding quotations—"and no repose until it not only sees all in God, but *feels* Him in the depths of its own personality, as the pulse of inward being." To a similar effect, both in his lectures on the "Science of Religion" and in his lectures on the "Science of Language," Max Müller speaks of a "faculty of man, co-ordinate with, yet independent of, sense and reason, the faculty of the Infinite, which is at the root of all religions."[1] In the Bhagavadgitâ, he tells us, the Deity is represented as saying: "In hundreds and in thousands see my forms, various, divine; see wonders in numbers unseen before: . . . but you will not be able to see me with merely this eye of yours. I give you an eye divine."[2]

Philosophy has not been behindhand with corroborative testimony. Epictetus testifies to man's immediate intuition of reality which his own reason does not and cannot compass;[3] and in our own time Martineau has done much to reinforce the same truth. In Germany, Professor Eucken is teaching that "the immediate revelation of this all-inclusive spiritual life to ours, and its power to maintain itself steadily in presence of the perils and limitations of our human nature, is an axiomatic fact."[4]

Historically, we have the testimony of Socrates, however it be interpreted, to the direct guidance of an inward or inwardly speaking voice. "I have had it," says he in "The Apology," "from childhood. . . . The God has commanded me by oracles and by dreams and in every way in which the divine will was ever declared to man." He is

[1] "Lectures on the Science of Religion," p. 14. See also "Lectures on Science of Language," vol. ii. pp. 625–32.

[2] "Natural Religion," p. 232.

[3] Cf. Sidgwick, "History of Ethics," p. 100.

[4] Boyce Gibson, "Rudolf Eucken's Philosophy of Life," p. 99.

able, therefore, to manifest strength and quietness of spirit in his final address to those of his judges who would have acquitted him. "The prophetic sign which I am wont to receive from the divine voice has been constantly with me all through my life till now, opposing me even in quite small matters if I were not going to act rightly. . . . But now, in this matter, it has never once withstood me either in my words or my actions. . . . This thing that has happened to me must be a good. . . . I have strong proof of this: for my accustomed sign would certainly have opposed me if I had not been going to fare well." Socrates was too keen a cross-examiner of others, and of opinions generally, not to have cross-examined himself before committing himself to such assertions of his own experience. Also, he was too convinced an opponent of the lax and sceptical individualism of the Sophists—too alive to the necessity of emphasising the *common* elements in thought and experience—not to have refrained from making assertions of personal experience of this kind excepting on what seemed to him most urgent grounds. Marcus Aurelius, also, in recounting the influence that had been formative of his character, says: "The gods have done their part; their gifts, their aid, their inspirations have not been wanting to help me to realise the life conformed to nature; that I still fall short of it is my own fault, and comes of not heeding steadfastly the reminders, I may also say the dictates ["direct instructions" is Long's translation] of the gods."

Illustrative quotations from the various literatures of the world touching the higher self and its aspirations might easily be multiplied. In the Gifford Lectures for 1889, on various forms of natural religion, Max Müller sums up the general literary movement as follows: "The self of which man became conscious, as different from his merely phenomenal, or even his personal, being has been called by many

names in the different languages of the world. It was called breath, spirit, ghost, soul, mind, genius, and many more names which constitute a kind of psychological mythology, full of interest to the student of religion as well as to the student of language and thought. It was afterwards called the *Ego*, or the *person*, but even these names did not satisfy man, as he became more and more conscious of his higher self. . . . At last the consciousness of self arose . . . and became the consciousness of the Infinite or the Divine within us. . . . . We find the earliest name for the Infinite, as discovered by man within himself, in the ancient Upanishads. There it is called Âtman, the Self, or Pratyag-âtman, the self that lies behind, looking and longing for the Paramâtman, the Highest Self—and yet it is not far from every one of us."[1] The world's great Bibles make this their prevailing theme. And amongst English writers, Milton,[2] Locke,[3] and Ruskin[4] are examples of those who speak of a hierarchy of spiritual powers actively working and linking together in practical ways the higher parts of man's being with the Higher that transcends him.

Taking up these various threads of suggestion, may one not lay them together, and say that they lend colour to the idea that the selfhood of man may be enriched through channels of which the self of normal experience, the self of sense and reason, may become aware, but which have not their origin with that self? Ormond concludes his searching and suggestive survey of the "Foundations of Knowledge" with a clear avowal that what he styles "the

[1] Max Müller, "Physical Religion," pp. 109, 110.

[2] In the opening lines of "Comus"; in Adam's address to Eve in the fourth book of "Paradise Lost" (containing the lines, "Millions of spiritual creatures walk the earth," &c.); in his ode on his blindness and other places.

[3] Cf. a passage (par. 165) in his tractate on the "Reasonableness of Christianity."

[4] "Præterita," vol. iii. p. 172.

mystical consciousness," may under certain conditions become an organ of new and superordinary impressions; and that to the ordinary channels of knowledge the superordinary must under such conditions be added.

But this reference to "channels of knowledge" must not, any more than the term "supra-rational intuition," lead us to limit the relationship as though it were solely, or even mainly, one of knowledge. Alike the effort to bring this supra-rational element into fuller life within ourselves and the effect of its fuller realisation will be less speculative than practical. It is entering into relationship with an *Energy*; or, to use the more ethical phraseology of Matthew Arnold, with a "*Power* not ourselves that makes for righteousness." And the outcome in ourselves of this relationship is power. It is the identifying of our purposes with those of the Higher Reality, and it may well be that clearness of insight into those purposes is only possible through co-operation with them.[1] On its intuitional side, conscience may literally be our conscious realisation of *dominans ille deus in nobis*, as Cicero expressed it. On its practical side, however, we emphasise the active idea, *dominans*. Conscience attains its supremacy solely through our behaving as it enjoins.

Again, such an active relationship can hardly be conceived of as unaccompanied by emotion. Longing, desire, admiration, love, will set their seal to the fact that the self cannot participate in this high relationship with indifference. Some "cosmic emotion," as it has been not inaptly called, resembling the "religious feeling" of our ordinary speech and experience, will by its presence within us be voucher for the reality of the relationship. "I am part of thee. From thee I came. To thee I must yield myself up." A

[1] Cf. New Test.: "Whoso willeth to do shall know." "Even in the life that is most ordinary the part that is done for God is enormous," says Renan.

yearning as towards an object that is infinitely good and great will be stirred within us. Occasions that are small in themselves, when compared with the depth and the intensity of the feelings to which they give rise, will have power to move us strangely towards this infinitely Good and Beautiful and True. The face of a child, a strain of music, a few lines of poetry, a cluster of wayside flowers, a sunlit scene amongst the lakes, an evening visit to a rocky scar hewn out into a lofty amphitheatre and becoming for the hour a Temple: why are we so deeply stirred, uncovering as before an Unseen Presence? Is it not because by the side of the path we are treading a gateway ever opens out upon "the great road that leads from the seen to the unseen"?

We have now referred to two of the deeper aspects of the self-life as the sub-conscious and the supra-rational. The range of possible experience is seen even in this cursory discussion to be extremely wide. And, once again, we are led to the conclusion that the selection which we individually make from this wide range of possible experience is through behaviour. Hence the educator finds his chief work in providing opportunities for physical, mental, and moral activities, and in directing them towards the upbuilding of a complete, coherent, and efficient personality.

The results of the suggestions of this and the preceding chapter as to the deeper aspects of the self-life may conveniently be summed up in the form of a simile. Using as an illustration a reservoir, it would seem possible to say of the self that there are three traceable sources or supply. (*a*) There is the ordinary catchment area, the area of drainage bounded by the surrounding watersheds. To this in the life of the self corresponds the supply due to ordinary conscious experience. Nor does it seriously overstrain the metaphor to find in rivulets and their channels a

rough analogy to the flowing in through the senses of that which enters consciousness. (*b*) There are springs, which may have their real source from areas beyond the watersheds. These well up from beneath; and, whether according to the "cosmic memory" theory or to that of the transmission of the instruments of experience, may represent, in the life of consciousness, a subliminal supply from what was once above the surface of consciousness, but was so in pre-natal or ancestral experience. (*c*) There is the supply that falls direct from the heavens upon the surface of the lake itself, as well as that which distils on its surface as dew. To this corresponds—though the simile throughout narrows in the conceptions for which it stands—the supply which neither flows in by channels of ordinary experience, nor wells up from storage chambers of the past, but is immediate, and, perhaps, one might say, in directest fashion, our own. Personality or selfhood in this third sense becomes to this extent, at least, homogeneous with the Spiritual Energy which conditions it.

In some such fashion we are to judge of the capacity of the self; and in the light of it—or of all of it of which we admit the truth—we are compelled to educate. If all is true, then it will follow that "the successful educator is he who, either by knowledge or intuition, appeals to this self in the child." The higher reaches of selfhood—once they are within our ken—are brought more surely within the range of our influence.

SUGGESTIONS AND ILLUSTRATIONS.

1. Has not the educator, who studies and deals with the child with no less purpose than to make the most that can be made of him, resources at his disposal in the deeper flowing currents of our human nature which he may reach in their flow and turn to advantage in the lives of those he educates?

2. Speaking of the dividing line between happiness and unhappiness and tracing it to the possession of a lofty idea which each must needs acquire for himself, Maeterlinck writes: "It behoves us, the first thing of all, to prepare in our soul a place of some loftiness, where this idea may be lodged; as the priests of ancient religions laid the mountain peak bare and cleared it of thorn and of root for the fire to descend from heaven. . . . And the admirable will enter our soul, the volume of its waters being as the depth of the channel that our expectation has fashioned" ("Wisdom and Destiny," pp. 9–15).

3. The following is taken from a short paper on "The Problem of Moral Education in Schools," by Mr. Harrold Johnson, Secretary of the Moral Education League: "Will anything short of the infinite stir the infinite in man? Will he not have ultimately to take refuge perforce in the Source of All, and must he not feel, if the trust and peace and security (which nothing can mar) are ever to be his portion, that not only the highest interests of his nation and of humanity, but the highest interests of the universe itself (of which he is an integral part, and in which he lives and moves and has his being) call to him unresistingly for his utmost devotion? And must he not learn to cry when the fierce struggle within him goes on between the vaster and the narrower claims—'Not my will, but Thine be done!'

"Ill-stated though they be, these are the questions which confront the educational world to-day. And, under our changed conditions, let me again repeat, they have never yet been grappled with. Those changed conditions are, that whereas education was originally the prerogative of the priest, it is now, in the main, that of the laity, and that the laity has never yet learned to explore deeply, and, having explored, to trust the deepest intuitions of its own soul."

4. "Religion cannot be taught; religion must be taught.

We must keep both constantly in view. Religion cannot be taught. Each human soul finds it for itself. All alone, each soul weaves out its own web of truth, grows by its own inner vitality, and shares its inner life with no one. . . . But . . . as the young soul grows by its own inner vitality, so it needs its natural food. The teacher can in part supply this." (Canon Wilson, formerly Headmaster of Clifton College, in "Essays and Addresses," p. 50.)

5. "We investigate the nature of Education :—our conception of what can or should be achieved by school and teacher. The inquiry cannot be answered off-hand by a superficial definition, based upon a superficial psychology; on the contrary, it compels us to turn to the deep moral issues of human life in which all the social sciences seek their foundation; it raises questions of transcendent importance which every age seems to answer in a different spirit. Arnold's answer, for his age and country, was uttered in no uncertain voice: to him the world of morality and religion was the real world, and the aim, in his theory of Education, could be expressed only in the loftiest terms." (Professor Findlay, in his editorial Preface to "Arnold of Rugby.")

CHAPTER XI

A RÉSUMÉ

THE aims with which we set out were: to study in the light of modern psychology the characteristic endowments of human nature, the native tendencies and powers which, as they are called into activity by the challenge of outward conditions, determine to a large extent the course of the unfolding of personality: and to present incidentally a view of education which has the unfolding of personality as its central aim.

With regard to the first of these aims, what we have done has been—starting from the fundamental conceptions of a primary nucleus and a development from it, analogous to the processes of growth; first, to trace out man's instinctive tendencies, which are not only an initial source of energy but continue, side by side with what is derived from experience, to be a source of energy in all our mental activity; then, to follow the course of the mental process in one or two of its more salient aspects, noting (*a*) the combining of instinctive tendency with the results of experience (*b*) the continuity of the mental life, with a side-glance at the nature of memory and a main emphasis upon activity as the bond or basis of mental continuity. This was followed by a somewhat detailed reference to self-determination as one of the distinctive forms of the activity which belongs to developing personality. And, finally, a cursory view has been taken of the wider resourcefulness of the self whether in our sub-conscious life or in supra-rational intuition.

As to the second of the two aims, the educational reference has been kept up throughout. Such points have been noted as the following: progress has taken place and will continue to take place both in our conception of education and in our practice of it; the tendency is and will be to use more and more the spontaneous readiness and activity of the learner; the curriculum is being studied and will be increasingly studied and planned so as to be within the powers of the learner, and yet meet his nascent tendencies and call for effort; biological parallels, as is now almost universally seen, fit the case better than mechanical parallels; hence education is being increasingly vested with living and human meanings. Instinctive tendencies have been somewhat carefully noted because of their bearing upon both intellectual and moral development. We have seen that underlying the whole process of the blending between various parts of our experience is the activity of apperception, that is, the child's own active use of what he knows and what he can do in learning what is new. Opportunities for the exercise of character must be given—this was one or Dr. Arnold's great methods; opportunities, too, for the emergence of the sub-conscious. "Religious Education" —this is a corollary from the last chapter—will be rather a keeping of the scholar's mind and heart and will open to what is above him than the adding on of a new "subject," or, to put what is practically the same conclusion in another form, whatever is included in the school time-table as religious instruction will be less a matter of learning things than of acquiring an attitude and an outlook, and a liberty and strength of spirit.

INDEX

ACTIVITY, consciousness as, 144–148
Adams, Prof. J., 110, 145, 154–155
Addams, Miss Jane, 105
Adequacy, 13, 89, 98
Adler, Prof. Felix, 44
Affection, instinct of, 88
Alexander, Prof, 144, 146
Allen, Grant, 50
American schools, 57–59, 153
Anger, instinct of, 86–88
Apperception, nature of, 145
" references to, 68, 135, 155
Arnold, Dr., 154, 217, 219
Arnold, Matthew, 150, 208, 213
Association, 68, 103, 139–142
Attention, 66, 134, 144, 167
Augustine, St., 34, 206
Aurelius, Marcus, 211

BALDWIN, Prof. J. M., 39, 148, 153
Barnett, P. A., 158
Beale, Miss Dorothea, 118, 155–157
Behaviour, instinctive, 52, 56
" the basis of mental continuity, 142–144, 151
" as method of acquisition, 151–154
" as groundwork of character, 176
Benevolence, 99
Binet, 12, 79
Body and mind, 32–34, 40
Bon, Gustave le, 181
Bosanquet, Prof., 138, 158
Bradley, F. H., 35–36
Brain, disproportionate size in infancy, 51
Browning, 25, 37, 151
Bryant, Dr. Sophie, 136, 140, 141, 194, 195
Butler, President N. M., 153

CAIRD, Prof., 25
Carlyle, on sarcasm, 124

Carpenter, Edward, 14, 113, 186, 188–189
Cattell, Prof., 140–141
Change, 29, 38
Character, 174, 177
Child-study, bearings of, 5–6, 12, 14, 43
" methods of, 58–59, 78, 133
Civilisation and education, 13–14
Clifford, W. K., 86
Conscience, the tribal, 86
" and remorse, 174
Contiguity, principle of, 134, 139
Continuity, mental, 137–151
Cosmic memory, 182, 183, 188
" emotion, 213
" energy, 213
Courage, 98
Curiosity, 65, 114–115, 148

Deliberation, 163–167
Demonstration schools, 7, 59
Dependence, sense of, 101
Descartes, 16
Determination of behaviour by the self, 161–168
" of character by the self, 169–176
Dewey, Prof. J., 44, 136, 153, 155
Direction of mental life, 144–146, 176
Donaldson, Prof., 51
"Dooley," Mr., 75, 76
Drummond, W. B., 111, 136

Efficency, instinct of, 98–99
Emerson, 208, 209
Emotional instincts, 102, 103
Eucken, Prof., 210
Expectation, 147

Fear, instinct of, 85
Findlay, Prof., 44, 136, 158, 217
Finite and infinite, 23–26, 204
Forward-looking aspects of consciousness, 146–148
Freedom, 96–97, 159–160
" , moral, 170 175
Froebel, 13, 44

Galton, 17
George Junior Republic, 128–129
Gibson, Boyce, 159
Green, T. H., 160, 165, 168
Growth, as reconciling permanence and change, 35
" as the child's natural destiny, 98

Habit, 125–131, 177
Haeckel, 21
Hall, President G. Stanley, 60, 61, 74, 153
Harris, Dr. W. T., 122, 153, 157

Harrison, Frederic, on reverence, 101
Herbart, 13, 81, 92–99, 145
Hobhouse, Prof., 34, 39, 203
Höffding, 15, 27, 38, 39, 82
Hughes, J. L., 153
Hume, on mental continuity, 143
Hyslop, Prof., 163

IDEAL, the, 23, 67, 169, 175, 203–206
Identity, 30–39, 143
Imagination, 147–148
Imitation, 115–120
„ and the life of the school, 120–121
Infant education, 56–57
Infinite, 23–26, 205, 210–214, 216
Instinct, defined, 42, 45, 47
„ and education, 56, 74–78, 104–109
„ suppressed a source of power, 116–117
Intelligence and instinct, 70, 73, 121–122
„ and habit, 102
Interest, 67, 105, 110
„ Herbart's account of, 81, 92, 108
Interests, influence of, 106–109
Intuition, as sense-experience, 197
„ as acceptance of what is axiomatic, 197–202
Intuition as insight into fresh truth, 202–205
„ supra-rational, 205–215
Irons, on interest, 105

JAMES, Prof., 44, 70, 136, 150, 168, 178, 195
Janet, M. Paul, 106
Johnson, Harrold, 216
Judd, Prof., 39, 152–153
Judgment, 114, 134, 135, 200–201

KEATINGE, M. W., on methods, 156
Kindergarten, 57
King, on child development, 60, 79
Kirkpatrick, Prof., 51, 79, 136
Knowledge, organisation of, 134–136
„ foundations of, 27, 64, 69, 73, 212, 213

LANKESTER, Sir E. Ray, 70–72
Laurie, Prof., 205–209
Learning, methods of, 133, 134
Lincoln, Abraham, 123
Locke, 32, 109, 212
Logic, axioms of, 197–202

MACCUNN, Prof., 111, 180, 204, 208
Mackenzie, Prof, 23, 24, 26, 86, 203

Maeterlinck, 206, 216
Mann, Horace, 153
Martineau, 176, 205
McDougall, W., 39, 49, 52, 63
McTaggart, Prof., 30
Mellone, S. H., 30, 38, 150
Methods of child-study, 58–59, 78, 133
Mill, J. S., 142
Milton, 212
Mind and body, 32–34, 40
Modifiability, 21–22
Montaigne, 32
Morgan, Principal Lloyd, 39, 52, 54, 63, 76, 79, 102
Movement, as self-expression and as method of gaining experience, 27–28, 55, 56, 58
Müller, Max, 210, 211, 212
Muirhead, Prof., 158
Myers, F. W. H., 191

Nascent tendencies, 39
Nucleus of personality, 17, 19, 23, 26
Nunn, Dr. Percy, 27

Organisable knowledge, 41
Organisation of knowledge, 134–136
Ormond, Prof., 27, 212–213

Parker, Colonel Francis, 153
Pearson, Prof. Karl, 18
Pestalozzi, 13, 44
Permanence of the self, 30–39
Physical basis of experience, 17, 20–21, 32–33, 48–51, 64–65, 71–73, 103, 104, 142
Plato, 44, 104, 107
Presentation, 13, 81, 92, 95
Psychical potentiality, range of man's, 23–27, 62, 113, 191–194
Psycho-physical organism, man as a, 31–32, 69, 77, 79–80, 103
Punishment, purport of, 87

Race, transmitted effects of experience of, 55, 182, 186, 215
Retention, 68, 142
Reverence, 100
Rhythm, 135
Ribot, on attention, 66
" on emotional instincts, 81, 84, 85, 104
" on activity as the basis of mental continuity, 151
" on the range of man's physical potentiality, 190
Romanes, 205
Rousseau, 44, 122, 123
Ruskin, 43, 106, 212

Salomon, Otto, 186
Selective principle in upbuilding of experience, 134, 135, 192

Selective principle in the up-building of the organism, 20–21
Self-activity, 19, 39–40, 43, 55, 65, 94, 114, 203
Self-expression, 27–28
Self-feeling, positive and negative, 88–89, 110
Sex-instinct, 89–91
Sherrington, Prof., 22–23, 189–190
Slaughter, J. W., 40
Smith, Adam, 86
Smith, Bompas, 158
Socrates, 210
Speech-acquisition, 131–132
Spencer, 6, 21, 25, 41, 206
St. Louis, schools, 57–58
Stout, Prof., 39, 111, 141, 144, 168
Stow, David, 87
Stream of consciousness, 29, 139, 146, 176
Sub-conscious elements, 181, 192, 194, 195
" elements, effect in education, 192–194
Sully, Prof., 111
Surprise, 101
Sympathy, 100, 122–124
Sympathy, its influence in the school, 124–125

Taylor, Prof. A. E., 177
Thorndike, Prof., 60, 79, 109, 133
Thought, fundamental laws of, 197–202
Thring, 41
Tolstoi, on anger, 87
Tracy, on speech-acquisition, 132
Tribal consciousness, 85

Universe and the self, 23–26, 168, 178, 213

Versatility, man's, 18, 21, 130, 190–192

Ward, Dr. James, 39, 146
Welton, Prof., 158
Westermarck, 81, 82, 87, 93, 204
Wild traits in tame animals, 78
Will, 108, 148, 154, 177, 195
Withers, Prof., 41, 94
Wilson, J. M., 217
Wonder, 101
Wordsworth, 209

Yeats, W. B., 182–185

UNWIN BROTHERS, LIMITED, THE GRESHAM PRESS, WOKING AND LONDON.

UC SOUTHERN REGIONAL LIBRARY FACILITY
A 000 048 841 1